MICHIGAN FARMER
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CONTENTS.

Agricultural.

THE CATTLE INDUSTRY OF THE WEST.

Mr. Richard Johnson, an attache of the Bureau of Animal Industry, has been traveling through the cattle-growing sections of the West, looking into the condition of the cattle and the ranges, and studying the changes which have already taken place, and those which the future growth of the cattle industry will make necessary. The rapid influx of settlers and the fences put up on their homesteads have so obstructed the old cattle trail between Texas and Montana that it takes several weeks longer to make the drive than last year, even. The route was originally chosen because of the abundant supply of water, either springs or streams being found every ten or fifteen miles, but these are fast being fenced in and the cattle men forced to make wide detours to reach water. The old trail must soon be abandoned on this account and a new drive found through a less favorable territory, or the driving of the cattle abandoned in a measure. To give up the drive entirely and ship by rail exclusively would be too expensive. Yet it is evident that the ranche system must be done away with, to a yet larger extent, within a few years, and new methods of doing the business adopted.

Texas has for a long time supplied the young cattle which were fitted for market on the rich grass pastures of Montana, Wyoming and Colorado. If these markets fail, cattle-breeding in Texas will receive a severe set-back. The quality of Texas cattle has improved greatly of late; in fact the improvement is generally noticeable throughout the Southwest. The Texas longhorn, a lean, sinewy animal, is being rapidly replaced by a cross between the Durham and Devon, and the average weight of the cattle is greater by more than 100 pounds than it ever was before.

In the Northwest, and east of the Missouri River, Mr. Johnson says the grade of the cattle has deteriorated in a marked degree. He says: "Four or five years ago what are known as the Oregon cattle, though by no means confined to the State of Oregon, were by all odds the best to be found on the range. They were nearly invariably three-quarters or five-sixths Durham, ran high in flesh, weighing 150 to 200 pounds more than Montana and Dakota stock, and their beef was equal to that of fine, stall-fed stock. To-day half-breeds are in the majority, the beef produced is not nearly so fine, and the average weight of the cattle has fallen off nearly 160 pounds. One fact has been proved beyond a doubt, and that is that neither in a cold nor dry section of the country should the Durham be introduced."

The number of cattle in Dakota, Minnesota and western Missouri is being reduced rather than augmented. Low prices have discouraged farmers, and they are selling off their cattle and going into horses. This decrease in the supply will have the inevitable result, in time, of strengthening the market, and the cattle-growing industry may replace wheat raising in the agricultural districts of the States named.

THE announcement is made officially that the government, through the Department of Agriculture, will make a special exhibition of fruits and vegetables at the Detroit Exposition. As the government can draw for its supplies, not only from all over this continent but from all the countries of the world, it is possible to make an exhibit which for variety, novelty, value and interest cannot possibly be excelled. Such an exhibit the managers of the Exposition expect will be made.

THE WOOLEN WASTE DECISION.

Recently J. Wild & Co., of New York, imported a lot of garnetted waste, which the collector at the port of New York assessed at thirty cents. Wild & Co. appealed to the United States Treasury Department, claiming the waste is dutiable at ten cents per pound. The decision of the Secretary of the Treasury is as follows, announced in a letter to the collector at New York:

The question as to the classification of merchandise of this character was decided by the department on the 26th of October, 1887, and it was then, as it was on the 13th of July, 1887, held that woolen waste which may have been broken up and put through the garnetting machine, whereby it becomes practically scoured wool, was dutiable at the rate prescribed for scoured wool—that is to say, when of the first class and costing under 30 cents per pound in the unwashed condition, at a duty of 30 cents per pound as assessed by you. The collector's decision in the case in question is therefore affirmed. The appraising officers recently in conference in New York considered the general question as to proper classification of so-called garnetted, carbonated, or other similar wool wastes, and have reported to the Treasury Department that in their opinion any process of manufacture whereby the value and character of a refuse article, such as waste of wool, have been changed or enhanced, and its identity as a waste or worthless substance destroyed, so that in fact it becomes scoured wool, it no longer belongs to the category of waste, but should be classified as scoured. The report says that the so-called garnetted and carbonated waste have undergone a very decided process of manufacture; their value has been increased to within a trifle of the wool itself; their appearance is made so closely to resemble the actual article as to deceive even experts, and by an admixture of the manufactured article with the natural wool, their purposes of use are identically the same, and should, in the opinion of the appraisers, be classified for duty at the same rate as the wool from which they come and which they so closely resemble.

Garnetted wool waste is practically unmanufactured scoured wool. In spinning yarn or thread from wool a part of it becomes tangled; this is called thread waste, and by putting it through the garnett machine it is restored to its original condition—clean scoured wool. Just enough noils and other wools are run through with it to make a mixture calculated to pass the custom house under a duty of ten cents per pound instead of thirty cents. A large business has sprung up in the importation of this garnetted waste, which has heretofore evaded its proper rating. During the first three months of this year, 2,229,986 lbs. of this bogus "waste" were imported from Bradford, England, where there is a regular manufactory established.

The decision of the Treasury Department is in accordance with common-sense and the plain intent of the law. The question was whether the duty should be fixed by the trade name, when that name did not properly describe the article, or whether the real quality or name of the article should fix its dutiable rate. Certain importers who have heretofore paid ten cents per pound duty on wool actually dutiable at three times that sum have now an opportunity to reflect "What's in a name!"

THE BULLETINS OF THE DEPARTMENT OF AGRICULTURE.

When a small boy does well we think it right to give him a word of praise. Men, even old and wise men, are often no less encouraged and made glad by the kindly recognition of their efforts to do good. The agricultural and live stock papers generally are commending the action of Hon. J. M. Rusk in providing for the frequent issue of bulletins giving briefly, in plain words, the more useful and practical parts of the larger and more scientifically written reports of the Department of Agriculture.

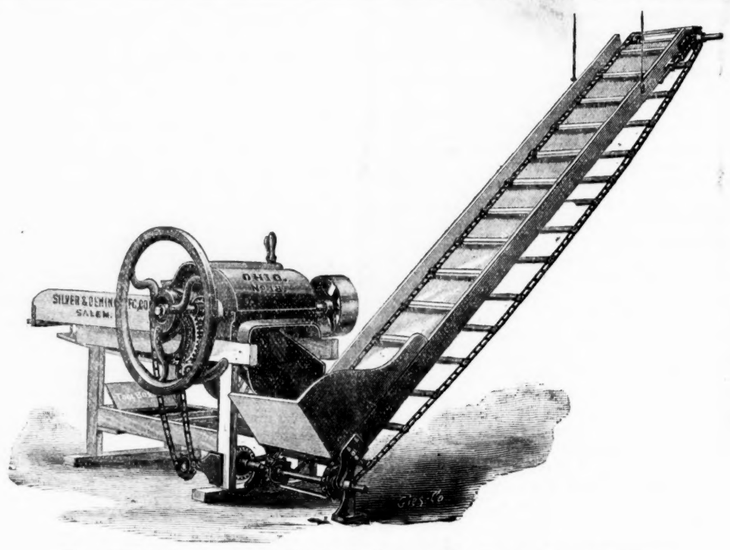
In order that these documents may have a wide circulation and reach the parties most likely to appreciate them, the Hon. Secretary of Agriculture has arranged for securing lists of the leading stock growers in each county. As a rule the live stock men pay most attention to one particular class of animals, to horses, or cattle, or sheep, or swine. The design is to group them according to the class in which they are most interested, selecting as far as possible one man for each class in each township, or at least in different parts of the county.

Much valuable information gathered by the Department of Agriculture will thus be promptly placed in the hands of those especially interested in the matter presented in each particular report, and the several editions will circulate almost entirely among those to whom they will be of the most value. A good scheme this, one which the farmers and live stock dealers will most heartily approve.

The recent flurry among some breeders in the matter of express rates has blown away. The old rates are restored and now the pigs can travel by express at merchandise or single rates.

The wheat crop in central Illinois is not yielding as well as last year and the corn is not fulfilling the high promise of two weeks ago. Oats have averaged well, the hay crop, red clover particularly, has been heavy; though owing to frequent rains it has not all been put up in the best of condition. Stock hogs are more plentiful than usual, hog cholera very scarce. A large number of letters addressed to veterinary surgeons and others, throughout the State, fail to discover any serious diseases among hogs this summer. PHIL THRIFTON.

SPRINGFIELD, Ill.



The "Ohio" Standard Feed Cutter, with Reversible Carriers.

THE SENTIMENT OF THE PEOPLE.

MICHIGAN STATE GRANGE,
MASTER'S OFFICE,
BERRIEN CENTRE, Aug. 1, 1889.

To the Editor of the Michigan Farmer.

I have been a warm friend of our Agricultural College for many years. I have viewed with pleasure its growing favor with the agriculturists of our own State, and especially have I felt proud of the marked change and progress in the Department of Practical Agriculture during the last ten years. Prior to that time it was my pleasure to visit our College in a representative capacity on several occasions. I could not fully approve of the condition of the grounds and the farm and stock as found on those visits, and went away with many misgivings. During the last ten years I have visited this institution in a like capacity. I found a marked improvement, and in every instance the remark was, "We have a good man as professor of practical agriculture, and with the scientific professors in the other departments our College must come to the front, and stand at the head of all similar institutions in the nation." But to my astonishment and chagrin the last two or three years there has seemed to be a disposition on the part of some one, or class, to bring discredit on the practical department of this college. Should this idea prevail and the Board conclude to remove Prof. Johnson, with the full intention of securing a professor of scientific agriculture in his stead, then will the high standard of our beloved institution be lowered.

I have watched the management of our College for eight years, closely, and have come in close contact with all the professors. While I have great faith in all, I must say that in the class-room, in the office, on the farm and with the stock, Professor Johnson has presented all his thoughts in a clear and practical way. His department is equal to that of any professor in the College, and in my opinion he is entitled to a fair and impartial investigation. His thousands of friends in this State want to know what he has done to receive the condemnation of the Board; and not he alone but the department should receive a full and fair hearing; and then if the combined wisdom of those young students who presented the petition to the governor asking Prof. Johnson's removal, should prove conclusive evidence that they are "the power behind the throne" and the element that should dictate, then we have no need of a State Board of Agriculture.

I do not wish to dictate to our Board in any way; it is composed of many of my best friends in this State, and men for whom I have nothing but the kindest wishes, but I cannot help putting in my protest against this public announcement that Prof. Johnson is requested to resign, and then pin on to the finale, that they have nothing but the highest regards for his energies and untiring ability, etc. Let us know what the trouble is, and if he has committed an offense remove him; if not and he on the other hand has done his duty faithfully, honorably and fearlessly, as a large majority of his friends do believe, then retain him.

Yours truly and for the right.
THOS. MARS.

GREENVILLE, July 31, 1889.

To the Editor of the Michigan Farmer.

DEAR SIR.—Wherever I turn some one confronts me with questions concerning the Agricultural College troubles. From opinions expressed, I learn that the present state of affairs is belittling the institution in the estimation of even its warmest friends. One says, "Expel all the students;" another, "Discharge the entire faculty;" another, "Appoint a new Board of Agriculture;" another, "Sell the whole institution for what money it will fetch;" &c., &c.

Several months ago I expressed my opinion on College matters pretty forcibly, and was at once overwhelmed by the wrath of an epistle from an old friend, notifying me that I was a presumptuous and premature judge of affairs, as I had not been at the institution. I was also invited to come and see, then to be of such opinion as I preferred. I went, I saw, and was of the same opinion still. This was in August last, and yet I went again in January, kept a close watch for that festering cancer which is sapping the life of our grand old College. I conversed with the man upon one side of the faculty, and with some men upon the other side. I called upon Prof. Johnson and requested him to show me over the farm department. In company with several gentlemen he conducted me entirely over the farm. We passed through the barns and fields, and experimental plats. I questioned him upon these things almost to a degree of impertinence; in connection with most every plat, I asked the day when planted, quantity of seed, fertilizers used, depth of plowing, condition of drainage, what to be proved by the experiment, and every conceivable question designed to test a man's interest in his work. The professor had no intimation of my designs, unless he was shrewd enough to surmise them, but in nearly every instance he answered these questions without hesitation, and without referring to any records. The stock was in good order, the crops fine, the weeds down, the drains working, the barns the best kept I ever saw them, tools in order, and every body in the department civil and sociable, and disposed to be instructive.

I stated the result of my search and my satisfaction to other members of the faculty, and asked what was the matter. I was informed that as an experimenter and practical farmer he was the very best, but there was something to the effect that he failed to interest his classes. Noticing that these gentlemen were reserved in their exposition of the matter, I could only honor their judgment for it, and persisted only in asking this question: "If there are two sides to this matter, and Prof. Johnson has given his to the public, thereby prejudicing the public against you and the College, why do you not give as freely the other side?" The answer was: "We do not propose to wash our dirty linen in public; if he wants to, we will suffer it to be so." I could scarcely do less than infer from this that "Faculty Row" once meaning the row of dwellings along the front of the river, had become "Faculty row"—a big fuss in the faculty, of the existence of which the students were well aware, and not slow to scheme in accordance. I questioned some students; they only said, "His lectures are dry."

I talked with an assistant; he waxed wrathy and eloquent, "The Professor (Johnson) was dry." "Would you pay your money to have a man teach you how to make your farm pay?" I confess the gentleman struck me high that time, for I would pay something just now to learn a rapid road to riches by agriculture. How is it, brother farmers, do you work for your health?

I can only say I am disappointed with, and ashamed of the whole proceeding. A doubtless, in the first place, trivial difficulty has grown into a public scandal. Some one has been abused. Prof. Johnson has freely stated his grievances, the accused upon the other side are wholly reticent. In this I am puzzled, for I know there are some sound fighters among them. Prof. Johnson professes that he has been denied a fair investigation.

The people of the State have justly taken hold of the matter, and petitions are out and have been largely signed, demanding that such an investigation be accorded him as shall leave no grievances unredressed. Then to prophesy results: If the accused members of the faculty, antagonizing Johnson, are blameless, they may come forward with a willingness surprising to us all; if they are in danger of incrimination, there may be a wholesale business of resigning; a calamity of no small importance to the College and the State, for whatever may be said of faults and errors, the services of such scientists as Dr. Kedzie, Dr. Beal and Prof. Cook are extremely valuable to the welfare of our College. Yet looking upon them as I do, as guardians of my boyhood, as exemplary characters, upon whose example I long ago attempted to base a manhood of usefulness, I must concede that the College must some time do without them, and is therefore, in any event, of more importance than they; and if they have, as is alleged, sought to do petty spite greatly injurious to the College and unjust to the farming and taxpaying people of Michigan, I must submit to the verdict, but may the calamity of such mortification yet be spared me a long time.

With respect to those dry lectures, have not all noticed how those juicy sentences of the scientist, concerning the nitrogen supply of bagas, became dry and dusty as soon as we stooped to weed the esculent?

It is charged that the agricultural department under other instructors has been looked upon as dry, and that students have illtreated those previous instructors. I do not remember that we ever looked upon Prof. Miles' instructions as dry. I do remember it was disastrous to be impudent to him. I remember a single instance when a class became restive under Prof. Gulley's instructions, and imposed upon him by undignified disorder. He was those boys' friend. I know he loved them; he bore it without rebuking them, and he could tell you how one of the class rose in his place and rebuked his mates, and advised them of the shamefulness of their conduct; they saw it, and in the end thought a great deal of Professor Gulley. Had there been some such student to take the lead in recent classes, may it not be possible much present mortification could have been avoided?

It is charged that "other departments have rewarded insubordination by selecting as assistants censured and suspended students." This is an open page in the college history, all can ascertain its truth or falseness with small effort. The facts are unmistakable. I cannot say upon whom rests the responsibility, or what injurious consequences may have resulted. The heads of those departments may have had little choice but the necessity of supplying an assistant, and they are men generally disposed to select an assistant who is proficient in their line.

If Prof. Johnson is a rare success as a practical farmer, makes good use of all applied science as pertaining to practical and experimental agriculture, I would respectfully submit that his work is there, openly before the students from inception to maturity. They can see it all, and with their sight punctuated with his explanations in the lecture room, I ask you what more in the name of common sense do you want him to teach? Is it chemistry? Is it botany or entomology? Would you rob the other departments of all their glory? Or is it Greek and Latin? Or is it *pure and vindictive spite* that ails you? To the Board of Agriculture, the Faculty, and the students, you cannot go further in this row, wasting our money, and your time, except the public has an interest in it. Let there be a final, full, fair and judicial investigation, that shall blot out suspense, and put a final settlement to the matter beyond appeal.

Respectfully,
JOHN E. TAYLOR,
Graduate Class 1876.

SALINE, Mich., Aug. 2, 1889.

To the Editor of the Michigan Farmer.

DEAR SIR:—Every farmer in this vicinity heartily endorses the position you have taken in the matter of the Agricultural College, and many of them hope that you will keep hammering away until justice is done to Prof. Johnson. I am in favor of harmony in the College, and believe that all elements that cannot harmonize with Prof. Johnson should get out. I cannot understand why the State Board should ask for Prof. Johnson's resignation as Professor of Practical Agriculture and then pass resolutions strongly endorsing him as a practical agriculturist. "Consistency, thou art a jewel."

Very respectfully yours,
G. L. HOYT.

MILO, Barry Co., Aug. 5, 1889.

To the Editor of the Michigan Farmer.

I enclose petition with 22 names of representative names of farmers from the south part of Barry Co. I could have got many more names, but I only wanted the names of our leading farmers and those who were familiar with this little unpleasantness. With most of these men you are acquainted. These names were got at a grange picnic in the interior of Barry Co. Jason Woodman was the speaker. He helped in the work. If the honest truth was known, this jealousy commenced away back with Prof. Abbott and Prof. Manly Miles, and the fight of our University in its early day to gobble the College. The same element is at work to have it rival the University and eliminate all manual labor from it, and make it not what it was intended—a farmers' college.

As you may recollect, I listened to Prof. Johnson's lecture last winter at Richland, Kalamazoo Co., and asked him a few questions as well as yourself. The thought came to me, could I but have heard that lecture nearly 60 years ago, when I made my first effort at farming without any agricultural training, or any one to give me any friendly advice! All I got was by looking over my neighbors' fences. Contrast now and then! It is not to be wondered at that with my dearly bought experience I should take a deep interest in our farmers' college in behalf of the rising generation. More is due to Prof. Johnson than any one man for making the College popular with the farmers of Michigan.

Very truly yours,
A. C. TOWNE.

LANSING, Mich., Aug. 6, 1889.

Prof. Samuel Johnson.

I enclose you a petition with the names of the principal stockmen of Ionia Co. attached. The entire farming community is asking for your retention. I can get the signatures of 99 out of every 100 farmers in Ionia Co. to a petition to have you retained. We feel that the Board of Agriculture is making a serious mistake in asking your resignation.

Yours very respectfully,
N. B. HAYES.

THE "OHIO" STANDARD FEED CUTTER.

We this week give an illustration of the "Ohio" Standard Feed Cutter with Reversible Carrier, manufactured by the Silver & Deming Mfg. Co., of Salem, Ohio. It is constructed in the most substantial manner, and has several improvements that add materially to its efficiency. It has a capacity sufficient for the use of large stock raisers and feeders, being equally serviceable as an ensilage or dry fodder cutter. It has a capacity of six to ten tons of green corn fodder per hour, and weighs 700 pounds. The company make a full line of feed and ensilage cutters, from the smallest to the largest, with and without elevators, to run by hand or power. The company have issued a handsome descriptive catalogue of the machines made by them, with a price list of each. It also contains some very practical articles on silos, ensilage and feeding, which every farmer should read. There are also plans and specifications for the construction of a hundred ton silo. Any of our readers can procure this work free of cost by dropping a postal card with a request to the Silver & Deming Mfg. Co., Salem, Ohio.

WHEAT RUST.

The last bulletin of the Agricultural Experiment Station of Indiana, issued in July, is devoted to the subject of rust in wheat, one of the chief pests or diseases of the wheat plant. Since experimental work began at Purdue University, wheat is the crop which has been chiefly studied, not only in regard to culture, varieties, etc., but also the chief enemies, insect and vegetable, which affect the crop. The rust on wheat is due to the attacks of several species of fungi, and low lying, rich soils are most subject to the disease. No varieties are proof against rust, yet some possess greater powers of resistance than others; and it is also thought that an excess of nitrogen in the soil is to be considered as a factor in the appearance of the disease. Where rust is prevalent, early ripening varieties are to be preferred.

We quote the more important portions of the bulletin:

"Wheat rust belongs to a division of the rusts known to botanists as *heteræcismal*, the meaning of which term is essentially embraced in the thought that these plants are capable of the development of several apparently distinct stages or forms in the course of a year's growth, at least one of which appears upon some plant very dissimilar to that upon which its first or spring form develops. This transfer of the disease from one host plant to another is always accomplished by means of very numerous small spores developed by the preceding growth. As in many other of the parasites which attack agricultural and horticultural crops, at least one of these forms is developed upon some shrub or weed, which may be disposed of without loss to the producer. This fact suggested an apparent remedy—the destruction of the weeds which seem to make possible the continued life of the parasites by furnishing the necessary nourishment for the alternate forms. This idea gave considerable impulse to the study of these forms of fungi, especially those with which this paper is concerned. Yet much remains in doubt concerning the full life cycle. Much more must be done in the way of close investigation before any one definite way may be proposed for the eradication or thorough control of the disease.

"The life history of these *heteræcismal* species may be divided into three distinct periods, consequent upon three different stages of development. Each of these growths produces spores, which upon germinating may give rise to the succeeding form in the cycle of development. As fungi they possess a very high degree of parasitism, living not only upon food derived from their host plants, but making themselves a part of the same. Their evil effects are all the greater in that, unlike many parasites, the affected plants do not die at the point of attack, but live on in a slave-like existence, being compelled to nourish the parasitic tissues throughout the whole period of growth. Thus it is that in the case of severe attacks the vitality of the affected plants is so reduced that they are much less able to withstand unfavorable conditions, such as sudden changes of temperature, and the result is a light harvest, but too evident when the product is weighed. This effect of rust is particularly noticeable in the spring wheat districts of the Northwest, where the crop over large areas is occasionally almost wholly destroyed through the combined action of rust and early frost. Over a large part of this territory, it is said, that in 1888 had the wheat been unaffected by rust the frost was too light to have had a serious effect.

"It is a common expression among wheat growers that 'red' rust does little damage to the wheat, but when the 'black' strikes it the crop is gone. This expression would seem to embody the thought that the two were not only different diseases, but also different in their mode of action upon the wheat plant, which in the light of present microscopical knowledge of their structure is wholly erroneous. They are but different stages in the development of an individual fungus. By the unaided eye we can see only the pustules of rust, the fruit of the parasite, consisting of aggregations of very small spores.

"Under the microscope the spores of the two stages appear even more diverse than do the pustules—yet close observation shows that both arise from the same vegetative fungal *hyphæ*, thread-like filaments which ramify the tissues of the wheat plant; the black spores often occupying the old pustules of the red, only appearing later in point of time. As the red is necessarily the forerunner of the black, and furnishes the spores for the general distribution of the disease at a time when most damage is being done to the crop, it is the one most to be guarded against; black must inevitably follow the red, unless the crop has been harvested before the fungus reaches this last fruiting stage. That the later appears to be of a more damaging character is to be attributed to the fact that the wheat plant has already withstood a heavy drain upon its food supply by the early growth of the fungus, and has at the time of the appearance of the new fruiting stage reached a condition of exhaustion, at which it is unable to furnish adequate nourishment for its own developing seed and the further growth of the parasite. The latter is able to care for itself, and the seed remains unfilled. Hence it is that when a late ripening crop is early attacked by rust it becomes almost a total loss. And it also accounts for the fact that early spring ripening wheats are less damaged than late varieties, the grain having reached maturity before the rust has attained its most destructive stage, or more properly speaking, has not been so long within the tissues as to reduce the vitality of the plant below a point where it is no longer able to form a perfect berry.

"These two spore forms are known respectively as the summer and winter spores of the parasites. The last named spores do not, as a rule, germinate the summer they are formed, but constitute a resting stage, lasting over the winter and germinating in the spring. They at once produce numerous small spores (*Sporidia*), which germinate immediately upon coming in contact with a suitable amount of moisture such as would be furnished by the moist surface of a leaf. The growing tube sent out by each of these bodies is capable of penetrating the tissues of some non-glumaceous plant and there producing a third form of the rust, known to botanists as the æcidium stage, because before their affinity with the grass rusts was determined, these forms were classed as a separate genus under that name.

"By means of carefully conducted trial cultures in which the sporidia from the germinating resting spores were applied directly to the leaves, care being taken that the plants upon which the tests were being made should be properly isolated, the particular kind of plants upon which æcidia are born have been determined for many of the grass and grain rusts. Each of the three species previously named as being the ones most destructive to the cereal crops have thus been investigated. For *Puccinia graminis*, various species of the barberry have been determined as capable of bearing the alternate form. The buck-thorns of the genera *Rhamnus* and *Frangula* support that of *P. coronata*; and the æcidium of *P. rubigo-vera*, the rust of which is undoubtedly the one most prevalent on wheat in Indiana, has been found to grow upon various species of the borage family, such as the common hounds' tongue (*Cynoglossum officinale*), a road-side weed in the older sections of the country. There is much doubt as to the actual value that the æcidium is to the rust. Certain it is the barberry is too rare a plant to be the cause of the wide-spread damage attributed to wheat rust. The same may be affirmed of the other two species; for all the æcidium bearing plants so far known for these rusts are exceedingly rare. There may yet be plants bearing this stage which remain undiscovered, but still it seems that in some cases this form may not always be necessary. However, it is fair to suppose that it is of some advantage or it would not exist. At best, it makes the continued life of the fungus more certain. The service rendered by it should probably be considered as that of re-invigoration, much the same as that which is rendered by reproduction in ordinary plants.

(Concluded next week.)

The Horse.

PROFITABLE BREEDING.

In a recent issue of the *Ohio Farmer*, R. D. Updegraff gives the following excellent advice: For several years colts have been the most profitable products of the farm. The street-car service of our cities has yearly required tens of thousands to take the places of worn out and broken-down stock. Year by year this service has demanded, and has been willing to pay for, better and more highly-bred animals, until now the old sneer about street-car plugs is no longer true. But the wonderful development of electrical science, and its rapid adaptation to street-car use, with the numberless advantages it offers, its comparative freedom from noise and dirt, saving the wear of pavements, and greatly increased speed, and what is to the stockholders of street railroad companies the most alluring of all its attractions, its cheapness, all demonstrate that a horse-car will soon be a curiosity. The Cleveland street railroad company alone uses one thousand five hundred horses, and they are worn out in four years. In a few months they will use none. Some companies will use cables run by steam, but the desire to carry on business in the city, and at the same time to enjoy the pure air, the grass, and trees, and fruits and flowers of the country, has become such a passion with so many of our people that capitalists are not slow to see that great fortunes are to be made by conveying great multitudes pleasantly and above all swiftly from the suburbs to the center of all our cities. Only a few years ago a dejected little mule jogged dreamily along once in thirty minutes out Euclid avenue from Wilson to the Corners, drawing a bob-tail car containing a few unfortunates who lived out that way and did not keep horses of their own. To-day every five minutes, and for part of the day every two and a half minutes, there sweeps down the avenue a train of two heavily loaded cars at almost railroad speed, propelled by an electric motor of fifteen to thirty horse power.

As a result this vast market for ordinary horses is forever doomed. But it by no means follows that the business of horse-breeding will no longer yield profitable returns. When railroads were being introduced it was universally feared that draft horses would no longer be needed, but a hundred times as many are in use as were then, and the supply cannot keep pace with the demand, although they are now being bred systematically and in enormous numbers. Railroads, instead of throwing draft horses out of employment as was anticipated, by opening up the country and creating business, created an immense demand which without their aid could never have existed. So the conditions of city life introduced and caused by the present craze for suburban homes, together with the marvelous growth of our cities, will require great numbers of horses for new purposes. The building boom calls for a multitude of the best heavy draft horses to convey brick from the yard, stone from the quarry and lumber from the wharf, and all of these must be hauled longer distances than ever before. So the demand for good, sound, handsome draft teams shows no signs of abatement. Again, the thousand and one necessities and luxuries of modern life are being brought to our doors as never before. The telephone enables orders to be sent everywhere quickly, and no further thought given to the matter, and all these systems of rapid delivery constantly require a greatly increased number of horses for their use.

But above all, there is a constantly increasing demand for buggy and carriage horses; horses with beauty, style, soundness, courage and intelligence, and if for buggy driving, ability to trot fast without boots or weights. Such horses were never more sought for, and never commanded better prices than right now, when our cities are full of creatures called "family and driving horses" that can hardly be given away. Horses to meet this great and growing demand cannot be bred or educated by accident. They are not produced by a cross between a thoroughbred and a Texas mustang. In these days of rushing electric street-cars, with a headlight at night like a locomotive, it will not do to take your family out driving behind a timid, nervous, shying, brainless, half-broken horse; that is if you expect to get your family all home alive. Our cities have a rapidly-increasing number of people who love to drive a beautiful horse, and to drive fast, but they don't want to have to worry all the time as to whether they can get home alive or not. Certain breeds and strains of horses can never be depended upon; others are always reliable, when properly educated.

If we would raise horses for a profitable city market, success can be almost insured by starting with those families of the trotting-bred horse of America which have demonstrated their ability to transmit to their descendants style and beauty, stamina and courage, affection and speed. Let us waste no time in trying to create a new breed. In all the world, from the thoroughbred pet of the aristocracy of England to the Arabian of the desert, who sleeps with his master's children in the family tent, there is no breed so richly endowed with all those high qualities which go to make up the ideal family horse, at once servant and friend, as the trotting-horse of America.

Cultivating Colt Courage.

A horse that is naturally courageous may be made cowardly by abuse. If he then receives blows the fear of them is uppermost, and any unknown noise is imagined to be a coming hurt, to escape from which is an uncontrollable impulse. The man who abuses his horse is often rewarded by the destruction of his property and injury to himself, the result of runaways. But when the courage of the colt is developed, it is not nearly so likely to run away, though he be hampered with blinds or abused by a cruel master, and it is hardly too much to assert that if properly treated he will never run away. Too often the training of the colt has an effect contrary to the cultivation of its courage. Forgetting that temper is the most valuable quality of the horse—its owner tries to "break" its temper to cow the animal. The horse should be trained, not broken; the training requires firmness mixed with much kindness. The man who has no control over his own temper and whose judgment is warped by anger is not fit to train a colt. As abuse will make it cowardly, so kindness will make it courageous. The basis of courage is confidence, and the first point is to secure the confidence of the colt. The next is to make the colt sure of his surroundings, watch closely, and whenever he shows fear of anything let him smell it. If he has confidence in his trainer, this will not be difficult. If he shies at a stump or rock, ride or drive him up to it. Drive him nearer and nearer the cars, until he is no longer afraid of them. Have the whistle sounded when his head is turned towards it, and repeat this till he ceases to start at the sound. Handle his limbs and touch them with a strap till he no longer shrinks.

The courageous horse, the one with the spirit trained, not broken, is the horse that does the most work. It does not lag; to drive it is a pleasure. It does not give up and leave you mired in a mud hole; it has the spirit, the courage to exert itself to its utmost. Among horses, it is the one with trained spirit, fine temper, that does the most work, the least harm, and in danger acts quickly and intelligently. What horse has more courage than the Arabian, and what horse is more docile, more enduring or admirable?—*Colman's Rural World.*

Excited Horses.

The best thing and only thing to do when your horse is excited is to calm him. In a high state of excitement the horse does not comprehend what you want. Everyone has seen a team where one horse would go forward and the other fall back. All the whipping and "hollering" that a hundred men can do will not start such a team once in 1,000 times. The team is excited. The horses show that by every action, and lashing and loud talk only makes matters worse. Calm the horses. Time will be saved if half an hour is taken to quiet any excited horse. An excited horse is just like an excited child. We have seen a child scolded and "jawed" at until it could not comprehend what was wanted of it to save its life. Stop scolding and calm the child, and the work you desire of it will soon be done. It is idle to expect an animal to do your bidding as long as it cannot understand your wishes.—*Horse and Stable.*

Horse Gossip.

THE pacer Argyle (2:14¼), has broken down.

W. W. BAIR, who drove Maud S. to her record, is dying of consumption at his home in Pennsylvania.

AT the Jackson fair and exposition, Sept. 2nd to 6th, purses aggregating $3,000 will be offered in the speed department.

IT is claimed that the dam of Veritas (2:20¾), winner of the 2:33 class at Detroit, is from running stock. His sire, Mark Field, was by George Wilkes.

IT is reported that an offer of $15,000 has been made for Hendryx, by a foreigner. If the offer is *bona fide*, a trip to Europe is among the possibilities for this representative of Michigan horse-breeding. It is a big price for a gelding.

JAY-EYE-SEE, the great trotter, (record 2:10) has probably made his last appearance on the track. He cut an artery in the leg while in pasture, and came very near bleeding to death. He is a gelding, and is owned by J. I. Case, of Racine, Wis.

THE Cleveland trotting meeting last week was a financial success. Axtell broke the three-year-old record, trotting his mile in 2:14¾. Guy, the phenomonal trotter, reduced his mark from 2:12 to 2:10¾. Johnston paced a mile in 2:06½, within a quarter of a second of his best time.

AYRSHIRE, who lately won the Eclipse Stakes, valued at $50,000, in England, is the property of the Duke of Portland. The total winnings of the Duke's horses this season amount to $395,000. All the Duke's winnings, since his recent marriage, he gives to charity. Ayrshire's win of $50,000 goes to the charity fund.

THE bay mare Silver, that Gen. Grant drove for a number of years, died a short time ago at the farm of George W. Childs, near Philadelphia. When at her best this mare could beat 2:30, and the General, who was a good driver, used to give her a spurt along the road. A short time before his death he presented the mare to Mr. Childs.

IN Gene Smith (2:16½), Thorniess (2:18¼), and Henryx (2:18¾), Dauntless has a trio of campaigners out this year that have not been equaled since Dictator's famous three, Jay-Eye-See, Phallas and Director, were sweeping everything before them. Dauntless was foaled in 1887, and got by Hambletonian, out of Sally Feagles, by Smith's Clay, son of Neaves's Cassius M. Clay.

THE gray pacer W. M. Singerly, who let the talent down so handsomely in Detroit, gave them another dose at Cleveland. He has any amount of speed, and paced a quarter in his race at Detroit in 30 seconds; but when he breaks he has got to be pulled to a standstill before he can again strike his gait. He broke at Cleveland, and broke a good many of his friends who placed their money on him.

THE Fairlawn Stud at Lexington, Ky., is to be sold at auction early in October, to settle up the estate of the late Gen. W. T. Withers. It was the latter's dying wish that the place be carried on, but his heirs have concluded to disperse this fine collection of horseflesh at public sale. The stud is one of the most extensive as well as valuable trotting horse establishments in the world. There are upward of three hundred royally bred animals on the place.

IN reference to an article on the toe-weights worn by Olmedo Wilkes in his race at East Saginaw, which appeared in this column of our issue of July 27th, Dr. W. A. Gibson, in Jackson, his owner, writes as follows: "My attention was called to an article in "Horse Gossip," in your last week's paper, in reference to Olmedo Wilkes and the weight of his shoes. Your informant stated he wore 16-ounce shoes and 28-ounce toe-weights, a statement without foundation. Olmedo Wilkes' shoes which he wore in his race weighed 14 ounces, and he had nine-ounce toe-weights. Knowing that you would not injure my horse by such a statement purposely, I simply request that you correct the statement and give actual weight. Also state that I have no idea of making a pacer of him."

The Farm.

Using Commercial Fertilizers.

The use of commercial fertilizers has not yet assumed permanently large proportions in the west, except by that class, not large, who are engaged in the production of special crops. The use is principally confined to gardeners. Farmers, however, are paying increased attention to the proper saving of barnyard manure, the best and cheapest, where it may be readily had. When chemical manures are attempted, they should be used with discretion—that is, rather lightly, and properly diluted. Phosphates, tank stuff, blood manure, etc., may be applied more liberally, without injury to crops by burning or killing outright.

Upon the subject of using commercial manures, the editor of the *Philadelphia Weekly Press* holds that in the hands of ignorance good manures are even more dangerous and unsatisfying than the diluted adulterations with which our farmers were formerly swindled. A neighbor undertook to grow a field of sweet potatoes. He proposed to have a big crop, could buy plenty of chemicals and did not stint their application. The sprouts were planted. All died. They were replanted and died again. For the third time the patch was reset, and the manure having expended some of its fervor, about one plant in fifty survived, but declined to grow. Last autumn one of our farmers saw me buying some muriate of potash. He asked, "What are you going to do with that?" "Fertilize a new strawberry bed." "Ah! I've had enough of that stuff, tried it on a patch of strawberries set last spring; killed the whole lot of 'em!" "Perhaps you used too much; 150 pounds per acre broadcast is enough." "Great gosh! I put on nearly two tons!"

Another tried a special sort of green sand marl for potatoes, covering each tuber as dropped with a big shovelful of marl. "It didn't do at all. Burnt the tops off as soon as they started. Don't want any more of that." The effect complained of was a most plausible indication of the manurial value of the article when properly modified by dilution. Farmers are convinced of the value of stable manures, and especially of the great fertilizing properties of the liquid excretions of animals; and yet whoever owns a pasture field must have noticed the death of the pasture land where these liquid excretions, pure and undiluted, came in contact with it. Even the more solid manures freshly deposited usually destroy vegetation beneath. For profitable culture land must be highly manured, yet high manuring when injudicious is a fertile cause for farmers' disappointment.

More Wheat from Fewer Acres.

W. F. Brown, in the *N. Y. Tribune*, gives some good ideas on the manner of preparing the soil for the wheat crop, which are timely, as this is the next work which will claim the farmer's attention:

The price at which wheat has sold for several years gives farmers small margin for profit, and no profit at all to the poor farmer who sows on impoverished land and puts his crop in on a poorly prepared seedbed. Yet we cannot well give up wheat; it is the best crop we have with which to seed to grass and clover, and the straw furnishes comfortable bedding and food to our stock, and adds largely to the bulk and value of the manure heap, as it absorbs the liquid, which, without it, on many farms would be lost. Then wheat can be stored in small space with little risk of loss, and a very small shrinkage, and is easily transported to market, and whether the price be high or low, it always commands the cash. No, we cannot do without the wheat crop, and we must try to make it profitable by getting better yields. A large acreage is sown every fall on such wet or exhausted land that there is not one chance in ten for a profitable crop, and it is not wise to risk seed and labor on such land. Again, all you can do toward securing a profitable wheat crop, ends with the sowing. Our summer crops which are cultivated may be planted on indifferently prepared seedbed and afterward, by careful and constant cultivation, we may, to some extent at least, make good this neglect; but when wheat is sown our work till harvest is done, unless we mulch or top-dress in winter, which is rarely done. The best seedbed for wheat should be level, so there are no depressions for water to stand; free from weeds or any plants which will hinder the growth of the wheat; settled and compacted, so as not to have cavities to hold water, and so the roots will take a firm hold of the soil; fine and mellow at the surface, so as to enable the young plants to appropriate quickly the plant-food in the soil and make during the short autumn period sufficient growth to be well rooted and blades to furnish some protection to the roots. I have seen wheat fields covered with a growth of volunteer wheat or oats at the time of sowing which overshadowed the young plants and injured them, and in some cases communicated rust to them. I have also known the wheat crop entirely ruined by plowing down a heavy growth of weeds or clover and seeding before the land had time to settle. Early plowing is always safest for wheat, not only because it gives more time to thoroughly prepare the seedbed, but because the necessary work which gives this fine seedbed thoroughly mixes the manure (if any is used), or helps the decay of any vegetable matter in the soil, and by rendering the land porous admits air and sunshine, conserves moisture and favors that chemical action which prepares plant-food for immediate use which would otherwise be in a crude and unavailable condition.

I believe manure will pay better on wheat than on most farm crops, and that the best way to use it is as a topdressing after the land is plowed. Used in this way it must be fine, so as not to choke the drill and in order that it may be evenly distributed, and the plowing should be done early to give time to apply the manure and follow it with enough harrowing to thoroughly mix it and to make the proper seedbed. I do not think there is any danger of getting the seedbed too fine if the land is plowed early and either settled by rains or compacted by frequent harrowings. I have seen farmers plow up the cornstubble between the shock-rows after cutting up the corn, and get a deep, loose seedbed that was very mellow; but this usually results in a poor crop, for a loose seedbed is what we wish to avoid. When wheat is to be sown on corn-land it should be kept free from weeds, and after the corn is cut up a mellow surface be prepared by cultivator, harrow and roller; but it should never be broken up. The large farmer with 100 acres or so to put in must push ahead without waiting on the weather, but the small farmer who sows from 15 to 30 acres can wait for the best conditions. If you can sow the seed as soon after a rain as the land will crumble nicely, it will come up stronger and make a better start than if sown before a rain and the land compacted and a crust formed on it. I think it always wise in summer plowing to keep a roller or plank drag in the field and use it each day on the fresh-plowed land, for if land is left rough and with cavities it dries out rapidly and the clods become hard, and should the autumn prove dry it may take three times the amount of work to prepare the seedbed which would be necessary if done at once, and usually if the surface is levelled and compacted as soon as plowed no clods will form and the moisture will be retained. In very drying weather it will pay to use the roller or drag twice a day, as land plowed in the forenoon would be too dry by night to crumble as it ought. Under ordinary circumstances I favor early sowing, but I would not sow with mercury near 90 degrees, as very hot weather does not suit the crop, and insects are more likely to harm it. It is wise to have your land prepared and be ready to take advantage of the best weather and condition of soil. Oft-repeated tests at the Ohio Experiment Station show that from five to six pecks of seed give better result than a smaller quantity, but with the land rich and in good condition and the sowing done early, less seed will be required than when conditions are not so favorable. If any farmer reads this whose wheat has failed to yield profitably, I would ask him to decrease his acreage and put his land in better condition, and see if he cannot make two acres produce as much as three or four have done in the past.

English Seed Exhibits.

At the recent Royal Show, held at Windsor, England, a noticeable feature was the exhibit made by the leading seedsmen. The English farmer is very careful about his seeds, and special attention is paid to grasses. English land is being laid down to grass instead of cultivated for grains, as the latter are no longer profitable. All grasses are shown in various stages of growth, from the young plants to those in full bloom and on to the ripened seed. Dried specimens are also shown. These again are exhibited in pasture mixtures in vigorous growth. Prescriptions for mixtures for various soils, for both permanent and short pastures, are illustrated with plats of growing plants. These are grown in boxes, which are easily transported, and when a number of them are placed together, a very interesting little field is shown. In one exhibit was a plat several feet square covered with turf taken from a pasture in the valley of the Kennett, known to be over a century old, in which the grasses were in full growth, and some of them in bloom. It was a capital study. About 15 per cent. was perennial rye grass. Beautiful miniature lawns are shown, illustrating the grasses recommended. Every variety of grain was shown in the seed and the complete plants. There were very interesting exhibits of cross-bred wheats and other grains.

Agricultural Items.

It is estimated that four million people buy poultry in the New York market. The city has two million inhabitants, and from its markets go supplies to many other points.

THE Kansas *Farmer* would have farmers remember that hogs ready for market reasonably early in the fall usually sell at better prices than at any time until after the first of the packing season.

W. H. GILBERT, of Richmond, N. Y., has a dairy of 50 cows, which average a pound of butter to every 14 pounds of milk, butter which last winter he sold at 41 cents per pound. He uses ensilage and says it is an indispensable requisite of the successful dairyman.

AN Austin (Texas) inventor has devised a steel corn husker which, drawn by a team, picks and husks the corn at the rate of eight to twelve acres a day. The team and the machine move astride the row, and every ear of corn, large or small, is picked up.

A FARMER says: Probably no one ever realized, until he had made a practical test of the matter or had closely observed the yard of some one who had done so, what a difference it makes with the manure heap whether the cows are kept in the stable or allowed to be around the yard or the pasture.

A VIRGINIA farmer, finding his soil would grow better crops of corn than of any other farm product, confined himself to that cereal. He raised it by rather primitive methods, but he raised 117 bushels per acre by weight, and the average cost per bushel, outside of rent and taxes, was nine cents. But if he had only raised 58 bushels to the acre, the cost per bushel would have been 18 cents.

FARMERS in Dodge County, Wisconsin, make hay and barley their chief crops. Of barley they average thirty bushels to the acre. The hay is principally timothy. Fields that have been cut several years without re-seeding, and without fertilizers, produce from one to one and a quarter tons per acre. Pasturing is not allowed, and the aftermath remains as a mulch to enrich the ground.

AT the New York experiment station, in 1888, an out-door silo was built. It had a plank foundation from which four by four joists fourteen feet long were raised at the corners for guides in building the stack. Green corn stalks were drawn fresh from the field and carefully piled on the stack nine feet deep, then three feet of sorghum were added, and then nine thousand pounds of corn which bore well-developed ears were thrown over the top. Timbers were laid across the top and pressure applied by means of chains and lever. The roof was then attached to the timbers by which the pressure was applied. The stack was opened in January, no part of it was unfit to eat, and a very large portion was of the best quality of prime ensilage.

SWINE, says *Farm and Vineyard*, need more clover and less corn. Disease would be less disastrous, and less of it. If young pigs are turned out in the clover lot in the spring and allowed to grass until fall they will not be fat, but they will have large healthy muscles and bones, and a keen appetite for corn. Then the fattening stage begins, or should begin, and the fat will increase rapidly. The animal will digest the corn better when in such a strong, healthy condition, and will not be so liable to disease. Such a hog seldom sickens, and the cost of raising one in this way is not more expensive than raising one entirely on corn. The clover fields should be brought into more general use, especially in the corn and pork-producing States. Statistics show that disease deducts from the profits of pork ten yer cent annually of the entire product.

The Poultry Yard.

Brahmas.

Brahmas were at one time much more popular than they now are, though of course, there are still many adherents of the breed, and classes at the leading shows are usually well filled. But their place in popular esteem has undoubtedly been taken by some of the newer varieties, whose economic qualities have not been so much lost by striving after external points. It seems to be the case with almost all varieties, that after a season of great favor they are relegated to an honorable but still more retiring position. This does not mean that they have failed, for in many instances they have had a determining influence upon the newer varieties. It has been so with the Brahma, but still, says Mr. Stephen Beale, it is to be regretted that seeking for color and heavy feathering of legs and feet has weakened the laying and table qualities of the breed. There are two varieties of the Brahma, the dark and the light, both of which present the same external characteristics, namely, tall massive frame; full, square, deep breast; small, neat head, surmounted by a pea, or triple comb; large powerful thighs, and legs of medium length, covered with profuse leg and heavy hock-feathering; small wings and tails; and long well-arched neck, covered with abundant hackle. Dark Brahmas combine the colors of silver-white and black, the latter predominating in the cock. The breast and tail are of a brilliant black, though in a few instances the former is mottled and white, and the leg-feathering is usually of the same color. The other parts of the body may be termed black and silvery white, the legs being orange-yellow in both varieties. The markings on a good Dark Brahma hen are very pretty. The ground color of pullets is clear grey, and on each feather there is a penciling, following the outline of the feather, of black or a darker shade than the body color. The hackle is silvery-white, sharply striped with black, pencilled as on body, and the tail black or black, edged with grey. Light Brahmas have in both sexes a silvery white color almost throughout the plumage, the black seen thereon being small in comparison with the white. The neck hackle is striped with black, the striping being more dense at the lower part of the hackle; the wing primaries are black, or black edged with white, the secondaries white on outside web, and black on part of inside web; the tail is black, and the tail coverts glossy black, the two upper ones laced with white; the leg feather is white or black and white mixed. Brahmas as a rule are good winter layers, and make large table fowls, though the flesh is too much on the thighs. They are admirable for crossing to secure size and stamina. In economic qualities we think the light variety is the better.—*Toronto Globe.*

Preserving Eggs for Winter.

Although many and various methods are recommended for preserving eggs, yet very few manage to keep them in large numbers. Limited supplies are stored away for family use, but the business of preserving them for market has not become general. There are many obstacles to success, which are not always considered. First, only fresh eggs are suitable, yet it is difficult to secure them unmixed with older ones. A single stale egg may cause the loss of all in the same package. Secondly, eggs from hens which run by themselves will keep much longer than those from hens which are kept in company with males. A fertilized egg will keep only one-third as long as one that is sterile. This should be kept in view, and the males separated from the hens at least ten days before beginning to save eggs for preserving. An egg which is unfertilized when placed in an incubator, and kept at a temperature of one hundred and three degrees, will remain unchanged and fit for the table at the end of two weeks, while a fertilized egg, under similar conditions, would be either two-thirds incubated or rotten. The difference in keeping qualities of the two kinds of eggs is equally great in a cool room, though not so rapidly manifested.

A third important point is to turn the eggs half over at least twice a week, to keep yolk from adhering to shell. If kept in a room where the air is cool, pure, and dry, no salt, lime or chemical is needed. The eggs may be placed upon racks, to which access is had for turning. But the difficulty with most cellars and even ice-cooled rooms is that eggs kept in them through hot weather are liable to acquire a musty flavor. If packed in boxes with grain the boxes may be turned every few days as indicated above.

A WOMAN who has made a success of the poultry business feeds newly hatched chicks on cornbread for the first ten days, then oats soaked till moderately soft in warm water—she uses her dishwater. The chicks like this food and grow and fatten on it.

A FARMER'S daughter recommends that for the first month chicks be fed entirely upon cooked food. Her experience has been that raw dough of corn meal is very bad for them. The dough hardens and ferments in their crops, and if they do not die their growth is checked. Milk is excellent for them to drink, or to use to mix their food for cooking. A little cracked wheat and crushed corn may be fed, with soft food, after they are a month old, but not too much or it will pack in their crops. Sorghum seed is good for the fowls.

"WHAT on earth we're coming to, does anybody know?" The latest fad in poultry raising is to bathe the hens! Bathe in strong soap suds with a spoonful of coal oil added, wipe with a towel and keep by the kitchen fire till dry! It would be a sight for gods and men to see the farmer's wife putting her flock of fowls through the soapsuds and turning the kitchen into a hen roost to dry them off! And this is to be a remedy for gapes!

CLOVER contains two elements that are in demand by the hen—nitrogen and lime. It is rich in the elements required for the white (albumen) and the shell, and if plenty of it be provided for the hens, no better food can be given. Grain should only be a portion of the diet of fowls, yet but few flocks receive anything but grain, and as such food will not promote laying, it is not surprising that many well-fed flocks do not prove profitable. Substitute clover for grain and the result will be a larger number of eggs at a lower cost, and the flock will be kept in better condition.

A. P. HUNTER, in the *N. E. Farmer*, thus describes a shelter he makes for his chicken coops: I take a sixteen-foot board of half-inch matched pine and cut it in four or five equal lengths; if four lengths they are four feet each, if five lengths they are three feet two and three-eighth inches. I nail these to an inch square strip of spruce (half of a strip of furring is excellent) and simply incline it over the coop-pen adjoining the coop to protect from rains, at the other end to protect from the hot sun. It is surprising what a difference that shelter makes in the comfort of that hen and her brood! It was on the evening of the Fourth that this neighbor was telling of his unthrifty chicks. The next sunny day I purposely left a shelter off from one coop near which I was working and which I could observe frequently. The poor hen was in torture with the blazing sun almost roasting her; the chicks sought such shade as they could find, some squatting under a neighboring fence and some in the bit of shade made by the coop itself. Having satisfied myself of its utility I placed the shelter over the coop-pen and went in to dinner. When I came out the family were gathered under the grateful shade as happy and contented as any family of chicks need to be.

Detroit, Grand Haven & Milwaukee.

Depot foot of Brush Street. Trains run by Central Standard time. In effect June 24th, 1889.

	Depart.	Arrive.
*Morning and Chicago Ex.	6:35 a m	*11:55 a m
*Through Mail & Chicago	10:20 a m	*5:20 p m
Steamboat Express.....	4:50 p m	*9:45 p m
†Chicago Ex. with sleep'r	8:00 p m	†8:00 a m
†Night Ex. with sleeper..	10:50 p m	†11:40 p m

* Daily, Sundays excepted. † Daily.

Trains leaving Detroit at 6:50 a m, 10:20 a m and 8:00 p m connect at Durand with trains on Chicago & Grand Trunk R'y for Chicago and the west, and has parlor car to Grand Haven.

Chicago express has Pullman sleeper and Buffet car Detroit to Chicago daily.

Night express has sleeper to Grand Rapids daily.

Sleeping car berths can be secured at G. T. R. Ticket office, Corner Woodward and Jefferson Avenues, and at Depot foot of Brush Street.

W. J. SPICER, General Manager, Detroit.
E. J. PIERCE, City P. & T. Agent, Detroit.

WABASH, ST. LOUIS & PACIFIC.—Passenger station foot of Twelfth St. Try the Wabash Short Line to Chicago and the West. Standard time.

Depart.		Arrive.
*8:30 a.m.	..Wabash & Western Flyer..	*6:00 p.m.
§1:55 p.m.	.....Chicago Limited.....	§11:20 p.m.
§1:55 p.m.	St. Louis Limited Express.	§10:30 a.m.
*4:00 p.m.	Adrian & Butler Accommodation.....	
§9:50 p.m.	..... Chicago Express.....	§ 6:15 a.m
§9:50 p.m.	St. Louis and Western Express.....	§11:30 p.m.

§Daily. *Except Sunday. ‡Except Monday.

Horticultural.

The Fall Planting of Strawberries.

Most horticulturists are agreed that the best time to plant strawberries is in the spring. But it is sometimes expedient to set the beds in the fall, for various reasons, chief of which is usually the partial crop to be expected the next season. Matthew Crawford, of Cuyahoga Falls, O., gives the following directions for fall planting. As Mr. Crawford is a nurseryman and fruit grower of wide experience, he is a reliable authority:

By fall planting we mean the transplanting of runners of the present year's growth, whether it be done in July or October. By care and skill it may be done as soon as the young roots are an inch in length, or even earlier. The rule is, however, that a plant is not old enough to set until it has branched roots; nor is it self-supporting until some time later. For this reason it is necessary to remove one or more of the leaves when setting out very young plants in the summer, lest more sap be evaporated than the roots can supply. As the season advances, more roots are developed, and there is less risk in the operation. While it is true that the earlier the work is done, other things being equal, the greater will be the crop. It is equally true that plants set early in September, when there is more moisture in the air and soil, usually do better than those set in the hot and dry time. If delayed too late, the danger is that they will not get sufficiently rooted to enable them to resist the effects of alternate freezing and thawing. Young plants in the summer are comparatively tender and sappy, and much more easily injured than when more mature. If taken out of hard ground, the roots may be bruised or broken, and if exposed to sun or wind for even a few minutes, many of the hair roots will be destroyed. For this reason it is not best to take up plants in a dry time. It is better to let them grow where they are until rain moistens the soil so that all the roots may be lifted without injury. The later the work is done the closer should the plants be set to each other so that they may fill the row with roots and shade the surface with their leaves. If set twelve inches apart in the row in July, ten inches will be enough in August, eight in September and six in October. The sun should never be allowed to shine on bare ground between plants in the row during the winter or early spring.

The soil for fall-set plants should be rich, so that their roots may find what they need near by, for they have no time to go far after it. It is well to prepare the place a week or two in advance, so as to let the ground get settled. And it is very important that the crown of the plant be not covered.

If the weather be dry and hot after planting, so that the plants wilt, they should get one good watering in the evening and the soil should be stirred the next morning. If this proves insufficient, they should either have some shade during the heat of the day, or the first leaves that wilt should be removed to lessen the evaporating surface.

If it is desired to test a new variety the fall is the best time to plant it, for the reason that it will bear the next season and enable one to decide as to its value and give ample time to greatly increase the stock.

Fall set plants must be protected during the winter. Two inches of straw will answer. Of course the drainage should be such that water can not lie on or near the surface. Our method when taking up small lots is to drop each one in a pail of water as it is dug, and carry them to a shed where they are trimmed. Large lots are put in a wet sack.

When plants are received in a dry time, it is an excellent plan to plant them temporarily two or three inches apart in mellow soil where they can be shaded and watered. In a few days new roots will be formed, when, after a thorough watering, they may be removed with the soil adhering and set without any check.

The Apple-Tree Borer.

B. Hathaway, of Little Prairie Ronde, this State, says in the *Prairie Farmer*:

Only the careful and observing orchardist knows to what extent his orchard is affected by this pest, and the labor required to exterminate it when once it gets possession. Every year, especially in the West, thousands of trees are lost that, had the owners known what was the trouble, and taken suitable measures in the early summer, could have been saved.

The least hardy varieties are the most subject to attack. Those that have been injured, or are not thrifty from any cause, are extremely liable to its depredations. Those that have been leaned over by the wind, exposing the body to the hot afternoon sun, are generally the most badly infested and the most difficult to remedy.

As I have been quite successful, even beyond my own expectations, in saving trees that would ordinarily be thought past redemption, I will briefly give my method of handling them.

The first thing to be done is to straighten up the leaning trees, if not too large; and if less than six inches in diameter it can be safely done. I dig a trench from the south side of the tree to the north side, on the west, two feet or more deep, and distant from the tree according to its size. Then, by digging under the tree to the middle, or beyond, I am able to straighten it up, and I lean it a little to the southwest. As the roots and a body of earth go with the tree it is easily kept in position. Then I go over the borer-eaten portion with a knife, cutting out the insects and cutting back the edges of the affected portions to sound bark.

I put grafting wax in some vessel in which I can heat it. I build a fire among or near my trees to be treated, so I can heat the wax readily. I use a hand brush broom or an old paint-brush, and put the wax on the trees liberally and "piping hot," being careful to cover all the injured portions.

This kills the insects that have gone into the trees, and any eggs that may have escaped the knife. It shuts out all possible entrance for one or two years at least. It also, by shutting out the elements, promotes the healing process in the tree.

I have used pine-tree tar with apparently equally good results, and I mention this, as it is cheaper and more generally attainable than grafting-wax. I recommend, however, to put in resin to harden it somewhat—not enough to cause it to crack, but enough so the hot noon sun will not so melt it as to cause it to run off.

It is not improbable that the scent of the tar, and of the resin in the wax, may have a tendency to keep away the mature insects, as I seldom find any new lodgment of borers on the trees so treated.

While the months of May and June prove the best in results, the work can be done at any time. To go over the orchard in July, and even as late as August, may be the means of saving many valuable trees that would otherwise be lost.

Currant Worms.

A Dorchester subscriber has had much trouble with the currant worm, *Nematus Ventricosus*, an imported insect, that has caused much damage for some years past. I could wish there were no worse insect enemies to contend with. The eggs are laid on the under side of the leaves early in the spring by an insect that winters just under the surface of the ground or in the leaves or other rubbish under the bushes. The eggs can be seen by the naked eye laid along a rib or vein of the leaf. Soon after hatching the young larvæ begin to eat holes through the leaf and after a while crawl to other leaves, which they consume by eating from the edges till nothing remains but the leaf stalk and central rib. If one is much in the garden and has good eyes, the quickest way to destroy these worms is to notice the few perforated leaves near the bottom of the bushes and pick them off and crush in the hand or under foot. The hatch from two or three leaves may, if neglected, destroy a whole bush in a few days. I have had little use for poisons, so long as I could visit my bushes daily or three or four times a week early in the season. If the bushes are neglected till the worms are spread over them they can be easily destroyed by sprinkling the foliage with powdered white hellebore or the same in water thrown into the bushes with a garden syringe. I prefer the latter method.

But it must be remembered that there are two or more broods of worms in a season, and the first sprinkling will only destroy hatched worms, so there may be need of several applications during the season.

White hellebore is not a dangerous poison to man, and if used faithfully early in the season there will be little use for it after the fruit begins to ripen. In any event the first rain will wash the fruit clean. In reply to the Dorchester inquirer I would say that bushes on rich or poor soils are equally subject to attack, but it will be useless to apply poison except when the worms are eating the leaves. Little can be done this fall to prevent a spring attack, though some advise scraping and burning rubbish found under the bushes to destroy the pupæ or mature insects which may be secreted in it. A heavy coat of coal ashes under the bushes has also been recommended, but I have seen little result from this application, though such ashes are good to keep down weeds.

During cold weather, if a few barrels of sifted coal ashes kept in an out-building are used to absorb the chamber slops of the house, and are then thickly spread under currant bushes in the spring, they may grow so rapidly that the worms will do little damage if reasonably well watched.—*N. E. Farmer.*

Rust on Blackcaps.

E. J. Brownell, in the *Orange County Farmer*, in a very practical letter on this disease, says:

I have a theory that this affection is frequently, if not always, caused by some weakness of the bush; either lack of vigor in the parent stock or some lack in the soil in which planted, and that if the affected plants are removed at once on the first appearance of the disease and burned or removed entirely from the healthy ones it is all that is necessary to eradicate the trouble and that a remedy against a recurrence may often, if not always, be had by the application of some good, strong fertilizing material to add to the strength of the plants remaining.

This theory has been borne out in practice with me to a great extent, having on several occasions had from one-fourth to one-third of the bushes in a small plantation become thus affected and when first noticed digging out and destroying these canes and manuring the others left, giving first a good application of wood ashes and then mulching heavily with stable manure. There was no further trouble from this source. Of course it is annoying to have so many vacant spaces as this treatment will cause, but it seems to me better than to root out the whole plantation. If it seems desirable the ground thus left vacant may be worked over and some other crop planted in until the raspberries can be replaced with new healthy ones. Perhaps this treatment may not always prove as efficient as it has done in those cases that have come under my observation, but I believe it is at least worth while to give it a trial where this trouble prevails unless so large a proportion of the bushes are already affected that enough will not be left after removing those diseased to pay for the use of the land occupied, even if all those still healthy could be saved in good condition.

Set Young Orchards.

Old orchards are like old people, their will is good but their vitality is gone. Why suffer from a scarcity of fruit when by only a little trouble and expense you can have in a few years an abundance of apples of your own raising? How can a man enjoy the fruits of his labor better than by planting an orchard thereby having an abundance of fruit—the apple? The apple is the king of fruit, lasting almost the year through, and relished by both old and young. Look at the different uses we put the apple to, from the dainty jellies and pies to the substantial meal that the boys make off of them, and then one can not fail to suit the taste in the different flavors of the many varieties of both sour and sweet.

Fall will soon be with us and as soon as the leaves have turned, and before they drop young trees can be planted or set in safety. In setting out a young orchard select a piece of ground that is naturally dry, or thoroughly drained by ditching, as fruit trees will not do well on a sour wet soil. Crop the piece the year previous to planting the trees, thereby giving the ground good cultivation and thus freeing it from weeds. Do not follow the old system of rowing both ways but plant them at hap-hazard fashion, thereby securing the free circulation of air, and more sunshine which is beneficial to the ripening and coloring of the fruit. Dig your holes three feet square and two and one-half feet deep. In the bottom place rotted manure mixed with the top soil well stamped around the fibers of the roots. The best time to set trees is in the fall, mounding the ground well around the trunks. The mounds keep the water from the roots and thus prevent heaving which would loosen the roots. By fall setting we gain time and to the farmer time is money—and in the spring nature can do her work on a par with trees that have become established.

For the first four or five years keep the ground under cultivation with some light crop, giving occasional dressings of manure and ashes, and at the expiration of this time your trees will have begun to bear and you can say I am eating the fruit of my labor. In a few years you will have a surplus for market. Use none but strong thrifty stock and you will secure a good stand. Keep your trees pruned and never let the limbs cross each other. The best varieties for sale are the Baldwin and King of Tompkins. Let the farmer set the roadside with apple trees and let the village man set them in the corners of his lot, and all will profit by their work.—*Orange County Farmer.*

How Figs Grow.

Estelle Thomson, writing from sunny California, the "home of the fig," gives in the *Home-Maker* for July, a most interesting description of fig culture, and thus protrays the ripening of that delicious fruit:

It is a peculiarity of the fig tree that it never flowers outwardly. Many claim that it has no flowers, because they are so concealed; but they are, in reality, very numerous. A little hollow bud puts out on the side of the fig shoot. It is hardly noticeable at first—scarcely larger than the head of a common pin. Inside of this bud (or *sycorus*, as it is known), packed with the utmost skill and compactness, nature stores the flowers which are to make fruit by and by. Cut open a bud, after a time, and inspect its contents. The work is done nicely. The little green packing-case is stowed full in every tiny niche of florets that are eventually to become seeds of the perfect fruit. When about half-grown, the bud takes a resting spell. You think the crop may be a failure, it advances so slowly. But have patience—wait!

Of a sudden the bud-shaped case begins to swell; it grows larger every hour, and rounds out rapidly. You can hardly believe your eyes, watching it. Yesterday it was a bud, inclosing flowers; to day it is a fig, fully formed, rich in pulp and very sweet. It begins to take on color—it may be green or amber, red or white, purple, violet, black or blue, according to variety. It looks ready to eat. The bees come flying out to inspect it; the wasps hover near, anxious to tap it as soon as its juices will flow; the birds sit and rock in the tree tops and eye it longingly; the door-yard fowls crowd and hop with lusty springs to reach it; even the swine have a knowing way of rooting about the tree's base waiting for the tempting morsel when it falls; but you, keeping guard closely, say—It is a pretty sight, truly, but mine is the prize! And then, one day, when the sun shines down hotly until it has warmed and mellowed it through and through, you bring out your knife and clip its stem and lay back its quivering pulp and set your teeth into its delicious seeds and crunch, crunch delightedly, as you drink in its life juices; while all the birds and bees and wasps and doorway fowls, and even the swine, turn envious eyes at your selfish greed, and set about looking for another *sycorus* ready to swell.

The Shade Trees of Paris.

One of the glories of Paris is its beautiful shade trees, which are found on nearly all of the boulevards and principal avenues, and which are made beautiful by the care that is bestowed upon them. One notices particularly the arrangements made for supplying them with all the moisture they need. In most instances a depression some six inches deep is made around the tree, which is covered by a circular iron grating of ornamental design, four or five feet in diameter. These shallow basins are filled as often as occasion requires by the street watering corps, and the watering is done systematically and in a thorough manner. During the late dry spell many of these iron gratings were temporarily removed and the basins opened to the depth of a foot or more in order to give the roots of the trees sufficient moisture to keep them in the best condition. The trimming is most carefully arranged, and an avenue of sycamores or horse chestnuts in four lines of trees, and showing a luxuriant growth of foliage, is a beautiful sight. The branches, and even twigs lopped off in the trimming, are carefully saved and made into bundles of faggots, for no wood is ever wasted in France. —*Philadelphia Press.*

FLORICULTURAL.

The best time to plant pansy seeds is in the autumn. Sow out doors in September and cover the young plants with evergreen branches or forest leaves, being sure the seed bed is well drained. They will give fine blooms early in the spring.

The *Cobœa Scandens* is a beautiful and very desirable climber, and would be seen much more frequently but for the difficulty in getting the seed to germinate. It grows very rapidly when once well started, and produces many pretty blue flowers. The Wistaria is another very charming climber, but one not frequently seen. It has pale lavender flowers, growing in racemes not unlike the flowers of the locust.

Lilies need a good mulching to keep the root cool and moist. A bed of lilies that has been properly mulched in a few years will yield enormously; more than thrice the number of flowers will be produced, and they will be much larger, with better defined colors and of greater substance. A lily-bed should be made in a position where it can remain undisturbed for a number of years, and as long as the plants flower well.

Dorothy says, in the *Country Gentleman*: For a stately screen or dividing line, there is nothing quite so imperiously pretty as a row of hollyhocks. Not annuals, to be sure; and the forethought that sows seed in the spring for summer after next has need of faith, but with that faith and foresight it is entirely easy to have a grand show from the seed. Clumps or screens of sweet peas may often be utilized to accentuate an uninteresting portion of the grounds, or to conceal some homely object of use. Planted deeply and thickly, as soon as the frost is out of the ground, and brushed in advance, they will grow tall and stalky, in a charming union of solidity and lightness. Free cutting prolongs the flowering season, and few flowers fill a vase more exquisitely than a bunch of sweet peas.

The *Country Gentleman* tells how to make a wild garden, in answer to an inquiry, as follows: First select a piece of ground in a rather retired position, manure and cultivate it, and cultivate and manure it till it is rich, clean and mellow. Then purchase of the seedsmen all the perennial seeds you can obtain, and sow them broadcast and rake them in. If sown thick enough, not much else will grow on the land, and next year there will be a profusion of flowers. The strong will crowd out the weak unless special attention is given to the weaker ones. Add wild flowers from the woods and ravines, by marking them when in bloom, and digging them up afterward. We have seen flowering plants thus hold their places without care a dozen years.

In April, 1887, W. W. Coles, a Lansdowne, Pa., florist, bought a plant of one of the new roses, Mrs. John Laing, for one dollar. In July, in conversation with a friend on the question how many young rose plants could be grown from one stock plant in a season, quite a controversy arose, which finally culminated in a bet of a champagne supper that Mr. Coles could not raise 550 plants from one rose plant by the 15th of the following April. No restrictions as to methods were made, and Mr. Coles chose to propagate by grafting on Manetti stocks. December 24th the first lot of plants was grafted, about 175, and in February scions were taken from these, and on the day named, April 15, 1888, Mr. Coles had 1,300 plants fit to ship to any part of the country.

Agapanthus umbellatus is a plant which might be well termed the blue lily, and is one of the easiest to cultivate; being almost hardy it will grow without fire-heat; the only protection it needs in the winter months is to be kept clear from frost, which can be easily done if kept in a cold frame, the pot laid on its side and kept dry; as the roots are thick and fleshy, there is a large amount of sap stored up that serves the plant in good stead during the dull season, that little water is necessary; but when the plants start into growth in the spring, water should be given more freely; in fact, as the summer advances, and the plants show their flower-spikes, the pots should have a large saucer put under each, and be well supplied with water till the blooms are opening, when less should be given. The agapanthus makes a most useful change in color amongst the other flowering plants in the conservatory. It is a beautiful plant for blooming on the piazza, where it is very showy.—*Horticultural Times.*

The *Boston Transcript* says: Last spring, in the time when daisies blossom, a lady living on Mount Bowdoin went out to gather a bunch of the gold-hearted flowers. Seeing some exceptionally large and deeply colored clover blossoms, she stooped to pick them, and discovered a four-leaved clover, and another, until she had found seventeen four, and one six-leaved one on the one plant, not larger than her own hand. The plant was in a rocky spot, and its roots readily detached themselves from the scant soil and came up in her hands. She took it home, set it out in her garden, and it produced its kind through all the summer long. The plant never increased in size, its roots refusing to spread themselves, but she rarely visited it without being rewarded by from one to eight four-leaved specimens. In the autumn the lady transplanted the root to a small salt box, which it not nearly fill, but, since that time, it has born thirty-seven four, and a dozen five-leaved clovers.

Horticultural Items.

The Crescent and Cumberland strawberries have not yet been displaced by newer varieties.

A. I. Root, in *Gleanings*, says the bush Lima beans are considerably more tropical in their nature than the ordinary pole Lima beans. They must have warmer weather and should be planted later than pole Limas.

The cedar bird is a little rascal in the cherry orchard. Don't shoot him, though, for the sum of his good qualities exceeds the total of his injurious ones. Scare him out of the orchard, but spare his life. He's afraid of a stuffed cat, owl or hawk.

Mr. C. W. Garfield says that good culture of young asparagus plants for one year will make plants ready to be placed in permanent quarters. Asparagus is a strong feeder, but does not root deeply. It has a habit of storing immense quantities of goods in its fleshy roots to be used in rapidly pushing the growth above ground in the proper season, hence the value of having a large amount of available plant food within its reach.

L. B. Pierce, of Ohio, has been much annoyed by the raids of men and boys on his strawberry plantation. This season he mounted guard over his fruit, not with a gun, but with a spy-glass. This weapon brought the marauders near enough for identification sufficient to warrant legal action for trespass, and in some instances the sight of a man with an unknown instrument in his hand and taking down notes in a note-book so mystified intending raiders that they abandoned their purpose.

E. P. Powell, of Oneida County, N. Y., sets his currants in rows seven feet apart, and between the rows plants Cuthbert raspberries, keeping but four or five canes in a hill and not allowing them to sucker. The earth is made rich and strong and kept so, and the double crop is profitable, with currants at $2.50 and raspberries at $3.50 or $4. Rows of grapes are put eight feet apart; with currants between, and strawberries under the trellises. The strawberry crop is not ideal but fairly good.

A wash said to be effectual in keeping rabbits, mice, sheep, etc., from gnawing the bark of trees is made as follows: Fresh lime slaked with soft water (old soap suds is best), make wash the thickness used to wash house or fencing. Where one peck of lime is used, while hot add one gallon crude car bolic acid, costing fifty cents, one-half gallon gas-tar, costing ten cents, and four pounds of sulphur, Stir well. For summer wash leave gas-tar out and add in place of it one gallon of soft soap. Wash the last of May or June. This is also a preventive of the depredations of the borers. Use a flat paint brush to apply. Apply whenever it seems to have been washed off.

Speaking of strawberry culture, a writer in the *Country Gentleman* says: "If you have not clean land, it will be cheaper to plant a new bed each spring, and plow under the old one as soon as the berries are gone, than to clean out a bed and keep it to grow a second crop. I have usually done this, and I plant my old bed in sweet corn, and grow a full and profitable crop when planted by July 4. A few years of this rotation will give very clean as well as rich land, for the strawberries will receive large quantities of manure in the mulch alone, and when this and all the growth of vines are turned down to rot, it makes the land light, lively and rich; and as no seeds are allowed to ripen, in a few years foul land can be made so clean that the bed can stand two or more years if desirable.

Apiarian.

A correspondent of the *Bee Journal* says he has known a bee to fly one and one-quarter miles and return in eight minutes on a warm, still day. In a damp windy day it took the same bee 15 minutes to make the same trip. The bee was marked by a spot of red paint, on the back, so there could be no mistake.

The June issue of the *Bee-Keepers' Review* is a symposium on the subject of shade for bees. The novice in apiculture would exclaim "Who shall decide when doctors disagree?" Some noted apiarists say shade is needed and necessary; others equally noted say it is not necessary. You pays your money and takes your choice.

Byron Walker, of Capac, last year took a number of colonies of bees up the Mississippi River in search of nectar, advancing with the season of bloom. This year he went to Kenton, Tenn., the 16th of April, bought 100 colonies of bees, and the first of June he had taken a crop of 1,900 lbs. comb honey and 1,400 lbs. extracted. Mr. Walker makes a success of his peripatetic apiary.

J. M. Hicks, of Battle Ground, Ind., has a sample of alsike clover honey extracted in 1869, which he says is as nice as when it was extracted. He does not name the method by which it was preserved. Mr. Hicks is a strong advocate of alsike clover as a honey plant, saying it is the best crop for a fine quality of honey, and unexcelled by any other bee-plant in point of yield, as it often produces from 500 to 800 lbs. to the acre.

G. M. Doolittle keeps in his bee-cellar a quantity of saw-dust for a purpose he thus explains: "Every month I bring in a bushel or more of fine, dry basswood sawdust, such as is made while sawing sections, and scatter it on the floor. This sawdust will absorb almost its bulk in moisture, so that I retain it here to keep all dry, sweet and nice. Before I used this, the dead bees on the floor would mold and smell badly, but now all smells sweet and nice, and no mold appears."

A correspondent of the *Prairie Farmer* says: A beekeeper was once puzzled to know why all his swarms deserted, as they were put into clean, new hives. On investigating, he ascertained that his new hives had the odor of kerosene; they had been manufactured during winter and stored in the back room adjoining his grocery, where were stored barrels of kerosene and other supplies, and the hives had imbibed these odors. The smell of kerosene is very distasteful to bees.

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—AND—

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MICHIGAN FARMER STATE JOURNAL OF AGRICULTURE

DETROIT, SATURDAY, AUG. 10, 1889.

This Paper is Entered at the Detroit Postoffice as second class matter.

STOCK SALES IN MICHIGAN.

The following dates are claimed by Michigan breeders for sales of stock:

AUG. 31—Geo. Coleman, Livingstone Co., Galloway cattle.

OCT. 16—Coe Bros., Kalamazoo, Hereford cattle, Percheron Horses and Poland-China swine. J. A. Mann, Auctioneer.

OCT. 24—A. W. Bissell, Pewamo, Shropshires and Poland-China swine. J. A. Mann, Auctioneer.

SEPT. 4—W. H. McEwan, of Bay City, Holstein-Friesians. Sale to be held on the Ionia Fair Grounds. J. A. Mann, Auctioneer.

MR. ROBERT GIBBONS, editor of the FARMER, has been confined to the house by serious illness for nearly two weeks. His condition is considerably improved at the time of writing, but his engagements must necessarily be cancelled for the present, and it will probably be several weeks before he will be able to make renewals.

WHEAT.

The receipts of wheat in this market the past week amounted to 267,577 bu., against 169,906 bu. the previous week, and 395,555 bu. for corresponding week in 1888. Shipments for the week were 194,188 bu., against 85,992 bu. the previous week, and 293,580 bu. the corresponding week last year. The stocks of wheat now held in this city amount to 143,557 bu., against 96,109 bu. last week, and 350,852 bu. at the corresponding date in 1888. The visible supply of this grain on Aug. 3rd was 12,687,967 bu. against 12,134,879 bu. the previous week, and 22,997,794 bu. for the corresponding week in 1888. This shows an increase from the amount reported the previous week of 553,088 bushels. As compared with a year ago the visible supply shows a decrease of 10,309,827 bu.

The market here for the week shows a slight gain. No. 1 white closed a cent higher than on last Friday, and No. 2 red ⅝ of a cent. Futures in No. 2 red made a slight advance, but September shows a decline. Futures in New York and Chicago are also lower. Old No. 1 white sold here at 90 cents, and No. 2 red at 82, with light transactions.

The following table exhibits the daily closing prices of spot wheat (new) in this market from July 15th to August 9th inclusive:

	No. 1 White.	No. 2 Red.	No. 3 Red.
July 15	....	88	74
" 16	90	86	75
" 17	91	87	76
" 18	95	86½	76
" 19	96	....	77
" 20	96	89	77
" 22	95	90	77
" 23	95	91	78
" 24	95	91	76½
" 25	95	91	76½
" 26	95	91	75¾
" 27	95	91	75
29	95	91	75
" 30	94	90	75
" 31	....	85	75½
Aug. 1	90	82¼	75½
" 2	90	83	75
" 4	83	78⅜	74½
" 5	83½	79	74½
" 6	83½	79¼	74½
" 8	83	79½	74½
" 7	83¼	79	74
" 9	84	79	74

The following is a record of the closing prices on the various deals in futures each day during the past week; contracts of course can be filled with new crop wheat:

	Aug.	Sept.	Oct.	Nov.
Saturday	78⅜	78¾	....	....
Monday	78¾	79⅛	....	....
Tuesday	79⅛	79⅜	....	....
Wednesday	78¼	78⅜	....	....
Thursday	78⅞	79	....	....
Friday	78¾	78⅛	....	....

The Liverpool market was reported lower. In Chicago, this and better reports from the west caused free selling in that market, but Hutchinson stopped any marked decline by purchasing 1,500,000 bushels. At the close wheat was ¼ cent lower than the day previous. At New York wheat closed ⅛@¼ lower on a rather light line of business.

The crop in South Dakota, according to the Huron *Times*, is turning out better than was expected. It says: "The harvest of small grain in South Dakota is nearly completed. Fields which looked doubtful when the harvester made its first circle of the field soon showed the grain to be plump and heads well filled. The hot, dry days of June made the stand light, but July rains, with cooler weather, are making the farmers' hearts glad by a yield of better grain, and in larger quantities than the most sanguine dared hope for. The crop product of 1889 can now be quite accurately estimated. On the whole, the crop of South Dakota will fully equal three-fourths of a bountiful crop."

The following table shows the quantity of wheat "in sight" at the dates named, in the United States, Canada, and on passage to Great Britain and the Continent of Europe:

	Bushels.
Visible supply	12,194,470
On passage for United Kingdom	13,592,000
On Passage for Continent of Europe	1,568,000
Total bushels July 20, 1889	27,354,470
Total previous week	27,807,165
Total two weeks ago	29,067,953
Total July 21, 1888	40,072,810

The estimated receipts of foreign and home-grown wheat in the English markets during the week ending July 27 were 236,120 bu. less than the estimated consumption; and for the eight weeks ending July 13 the receipts are estimated to have been 4,347,728 bu. less than the consumption. The receipts show a decrease for those eight weeks of 5,400,984 bu. as compared with the corresponding eight weeks in 1888.

Shipments of wheat from India for the week ending July 27, 1889, as per special cable to the New York Produce Exchange, aggregated 760,000 bu., of which 560,000 bu. were for the United Kingdom and 200,000 bu. for the Continent. The shipments for the previous week, as cabled, amounted to 920,000 bu., of which 840,000 went to the United Kingdom, and 80,000 bu. to the Continent. The shipments from that country from April 1, the beginning of the crop year, to July 27, aggregate 9,480,000 bu., of which 6,340,000 bu. went to the United Kingdom, and 3,140,000 bu. to the Continent. For the corresponding period in 1888 the shipments were 15,860,000 bu. The wheat on passage from India July 16 was estimated at 2,400,000 bu. One year ago the quantity was 4,560,000 bu.

The Liverpool market on Friday was quoted quiet, with little doing. Quotations for American wheat were as follows: No. 2 winter, 7s. 0½d.@7s. 1½d. per cental; No. 2 spring, 7s. 2½d.@7s. 3½d.; California No. 1, 7s. 1½d.@7s. 2½d.

CORN AND OATS.

CORN.

The receipts of corn in this market the past week were 553 bu., against 10,453 bu. the previous week, and 11,286 bu. for the corresponding week in 1888. Shipments for the week were 3,826, against 4,732 bu. the previous week, and 10,239 bu. for the corresponding week in 1888. The visible supply of corn in the country on Aug. 3d amounted to 6,988,351 bu., against 7,153,060 bu. the previous week, and 9,009,049 bu. at the same date in 1888. The visible supply shows a decrease during the week indicated of 164,709 bu. The stocks now held in this city amount to 3,723 bu. against 12,840 bu. last week, and 22,517 bu. at the corresponding date in 1888. Trading in corn in this market has been very light for the week. As compared with a week ago the price is ¼c higher for No. 2 spot, being quoted at 38c, and September at the same price. At Chicago No. 2 spot and August sold at 35¾ as against 36⅛c one week ago for spot and 36⅛c for August. The Michigan crop report for August says that the condition of corn is lower than for a number of years.

The Liverpool market yesterday was quoted easy; not much doing. New mixed western, 4s. 2d. per cental. In futures August sold at 4s. 1½d.

OATS.

The receipts at this point for the week were 53,017 bu., against 44,042 bu. the previous week, and 63,208 bu. for the corresponding week last year. The shipments for the week were 2,781 bu. against 6,670 bu. the previous week, and 12,797 bu. same week in 1888. The visible supply of this grain on August 3d was 3,603,730 bu., against 4,252,763 bu. the previous week and 4,673,383 at the corresponding date in 1888. The visible supply shows a decrease of 649,033 bu. for the week indicated. Stocks held in store here amount to 22,296 bu., against 9,556 bu. the previous week, and 22,349 bu. the corresponding week in 1888. In the different markets oats for the week have been dull and closed lower. The general reports of the new crop promise a large yield and there is still considerable of the old crop on hand. In this market No. 2 white are quoted at 26c; No. 2 mixed at 22c, and light mixed at 23½c. For August delivery No. 2 mixed are quoted at 22⅜c, and September at 22c. At Chicago No 2 mixed have declined one cent for the week, selling at 20½c, with August at 20¼c and September at 20½c. At New York spot was quoted moderately active and futures less active but firm. Quotations yesterday were as follows: No. 2 white, 33@34c; mixed western, 25@29c; white western, 33c. In futures No. 2 mixed for August closed at 26⅛c, September at 26⅜@26⅛c, and October at 26⅝@26¾c per bu.

DAIRY PRODUCTS.

BUTTER.

There is a decided scarcity of first class butter in this market. There is absolutely no first class dairy to be had, and the supply of any grades suitable for table use is very short and the movement consequently light. The usual August drouth has shortened pastures and reduced the milk production, while the hot weather militates against the quality of the product and its condition on arrival. The best grades obtainable sell at 12½@13½c. Fancy, if it could be had, would bring 14½@15c. Low grades are dull and not wanted. Creamery remains at last week's prices, 14@17c, with the inquiry light. At Chicago the market has ruled firm for fine and fancy grades, with a large accumulation of medium stock which moved slowly at 12½@14c. New arrivals lack quality. Quotations are as follows: Good to choice Western creamery, 15½@16c per lb.; Elgin district or fancy, 16½@17c per lb.; fair to medium, 12½@13c; choice dairies, 13½@15c; packing stock, 7½@9c. At New York, the demand is light and the feeling weak, with low grades heavy and dull. Exporters are in no haste to place orders, and seem to prefer to handle low grades of factory at 9½@11c. Extra Elgin creamery commands 17@17½c; extra Western, 16½@17c, with highest figure only obtainable for strictly perfect quality. Grades below extra are neglected and unsettled, holders accepting what they can get.

Quotations in that market yesterday were as follows:

EASTERN STOCK.

Creamery, State, pails, fancy	17½@18
Creamery, State and Pa., tubs, fancy	17 @17½
Creamery, prime	15 @15½
Creamery, good	13 @14
Creamery, fair	11 @12
State dairy, tubs, fancy	@
State dairy, tubs, good	15 @16
State dairy, tubs, fair	13 @14
State dairy, Welsh, fancy	@..
State dairy, Welsh, prime	14½@15
State dairy, Welsh, fair to good	13 @14

WESTERN STOCK.

Western Creamery, fancy	16½@17½
Western imitation creamery, choice	13 @14
Western do, good to prime	10 @12
Western dairy, fine	12 @12½
Western dairy, good	10½@11
Western dairy, ordinary	@10
Western factory, firkins, fresh, fancy	12 @12½
Western factory, tubs, fresh, fancy	@12
Western factory, fresh, prime	10½@11½
Western factory good	9 @10
Western dairy and factory, ordinary	8 @ 8½
Poor butter	7 @ 7½

The exports of butter from New York since May 1st, the beginning of the trade year, compare as follows:

	Exports. lbs.
For week ending August 5	601,443
Same week 1888	136,963
Since May 1, 1889	5,494,925
Same time last year	1,477,204

CHEESE.

Michigan full cream cheese is still quoted quiet and unchanged in this market at 9@9½c. The cheese factories of the State appear to have generally done a good business this season. The Croswell factory has sold its June cheese at nine cents, it being shipped directly to England. With this shipment of 18,000 lbs. was sent 29,000 lbs. from adjacent factories. At Chicago a good trade was reported at higher prices, with buyers taking hold of all classes of stock quite liberally. Quotations are as follows: Full cream cheddars, 8@8½c per lb; twins, 8@8½c per lb; Young Americas, 8@8½c; poor to common lots, 3@6c; No. 1 Swiss, 9@10c; brick cheese, new, 6½@7c. At New York business was slow, with an advance of from one-half to three-fourths cent on best grades of State. The *Daily Bulletin* says fresh arrivals were scarce and shippers not anxious. Holders were not inclined to accept modifications of value. Advices from primary points were steady.

Quotations at New York yesterday were as follows:

State factory, full cream fancy, col'd	8¾@ 8⅞
State factory, full cream, fancy, white	@ 8⅞
State factory, full cream, choice	8¼@ 8½
State factory, full cream good	7½@ 8
State factory, full cream, common	6½@ 7¼
State factory, light skims, prime	@ 6¼
State factory, skims good	5 @ 6
State factory, skims, medium	3½@ 4¾
State factory, full skims	1 @ 3
Ohio flat	6 @ 7

The exports of cheese from New York since May 1 (the beginning of the trade year) compare as follows:

	Exports. lbs.
For week ending August 5	3,752,917
Same week 1888	3,017,856
Since May 1, 1889	35,422,956
Same time last year	34,524,659

At Montreal the market is steady but quiet, a mutual stand-off between buyers and sellers, with quotations nominally unchanged. Colored cheese is scarce.

At Ingersoll, 6,000 boarded; 1,000 sold at 9c; balance holding for 9¼c.

At Bellville, 1,960 boarded; 400 sold at 9c, and 600 at 9⅛c.

At Peterboro, 2,900 boarded, and 1,500 sold at 9⅛c.

At Liverpool the market is steady, with a moderate demand at advanced prices. American, new, finest colored, 45s. 6d.; finest white, 44s. 6d., an advance of 1s. on both white and colored, as compared with last week's prices.

WOOL.

Our last week's prediction of a dull August for wool seems likely to prove correct. It is still a waiting market. Both buyers and sellers are very slow and cautious, and not anxious to secure business by making concessions. The buyer pleads high cost and an uncertain market for goods; the seller seems to consider wool good property to hold. Some fear of values being affected by Treasury decisions affecting the duty is also alleged as an excuse for conservative action. Quotations remain unchanged, and there are no new features in the outlook.

THE Fish Commissioners of Michigan, at the coming State Fair, will make a complete exhibit of their work, from the incubation of the egg to fish fit to grace the table of an epicure. This industry is of the first importance to the farmer, who, by an actual study of the process, will be incited to aid in the work, which in a few years will make our lakes and rivers abound with sport that will call thousands of visitors from other States to make their homes in Michigan for a portion of the year.

THE Board of Agriculture, at its meeting on Wednesday, requested the resignation of Prof. H. R. Pattengill, editor of the *School Moderator*, and assistant instructor in English Literature under Prof. McEwan. The reason alleged was his criticisms of the Board in requesting the resignation of his chief. The professor, however, emphatically announces his intention not to resign, and says he can get more joy out of it by allowing the Board to bounce him. The *Lansing Republican* says that the students greeted Prof. Pattengill the next morning with three cheers, supplementing them with three groans for the Board of Agriculture. The Board seems to be getting into that position known as "between the devil and the deep sea;" it can please neither the people or the students. Prof. E. P. Anderson, professor of English Literature and History in the university at Athens, O., was elected to fill the chair vacated by Prof. McEwan.

LAST week a new company was incorporated at Springfield, Ohio, for the manufacture of a line of farm implements. Mr. A. W. Butt was elected president of the new organization, which starts out with a paid up capital of $100,000. Mr. Butt was for years one of the firm of P. P. Mast & Co., of that city, and later was one of the stockholders and an officer of the Albion Manufacturing Co., of Albion, Mich. He has had a long and intimate experience in the manufacture of agricultural implements and can be classed as an expert. The company is made up of men with an equal experience to that of Mr. Butt, and all are known as specialists in their different lines. The company among other things will manufacture hay rakes, cultivators, feed mills, corn shellers and post hole diggers. They now have buildings of brick covering 40,000 square feet, and three acres of ground to extend their works as business may require.

W. R. DOUGHERTY, of Mendon, Mich., writes us under date of August 5th: "I notice in a recent issue of the FARMER a call for a couple of car loads of Merino rams. I think one load of good ones could be got in this vicinity at from $5 to $8 per head. I would be willing to try and pick up a load at reasonable prices if I could get in communication with the parties."

THE Grass Lake Farmers' Club will hold its annual picnic at Aikin's Landing, Wolf Lake, on Wednesday, Aug. 14th. A large gathering is expected, as the picnics managed by this Club are always enjoyable.

THE AGRICULTURAL COLLEGE.

The State Board of Agriculture was in session at Lansing on Wednesday of this week. Several important affairs came up for consideration, among which was the appointment of a successor to Prof. McEwan, and the request for the resignation of Prof. H. R. Pattengill. But the matter most interesting to the farmers of Michigan is the action of the Board relative to the resignation of Prof. Samuel Johnson, at the head of the Department of Agriculture.

We regret, exceedingly, that the Board utterly refused to grant the investigation asked for by Prof. Johnson and his friends, though the request was strongly backed by petitions and personal letters asking such investigation. Prof. Johnson's resignation was accepted.

As a misapprehension seems to exist, notably on the part of the press of this city and partially throughout the State, as to what the petition presented to the Board really asked for, we desire to state most emphatically that these petitions *asked for an investigation only, not for reinstatement.* Prof. Johnson's friends, who signed the petitions, believed then, as they still do, that investigation would prove reinstatement merely an act of justice.

We subjoin a copy of the text of the petition:

WHEREAS, The State Board of Agriculture at a recent meeting, requested the resignation of Prof. SAMUEL JOHNSON, who has for ten years been the efficient head of the Department of Practical Agriculture at the State Agricultural College; and

WHEREAS, We, the undersigned, residents of the State of Michigan, have come to respect and value Prof. Johnson's work in those lines in which many of us, as farmers and stock breeders are practically interested, and have seen the Agricultural Department of the College develop under his management, until it is a pride and honor to the State; and further, believing that the Farm Department should be vigorously sustained, and that its head should not suffer on account of his decided and constant advocacy of its interests; and further, because public sentiment on the question of support of this Department has been measured somewhat by the recent appropriation for a new building, which action had the hearty support of all the farmers' organizations in the State;

NOW, THEREFORE, WE PETITION The Honorable State Board of Agriculture to grant an impartial, judicial investigation of any charges preferred against Prof. Johnson, and of any that may be preferred by him. We fully believe that justice to the Farm Department, to Prof. Johnson, and the future prosperity of the College, demands this action at your hands.

We further respectfully request that the resignation of Prof. Johnson shall not be accepted until such investigation shall have taken place.

These petitions, sent to the principal farmers, stockmen and breeders of the State—men who are practically interested in agriculture, were returned to this office in such force that on the Tuesday before the meeting of the Board, 1,668 names had been sent in, and enough have since been received to swell the total to over 2,000 farmers of this State who asked—not a reinstatement, but only an investigation. Some prominent men, learning of the movement, asked for copies to circulate; many were returned to us with strong expressions of approval; not one came back unapproved.

These petitions were submitted to the Board, with the following letter to the President:

MICHIGAN FARMER OFFICE,
DETROIT, Aug. 5, 1889.

To the Hon. Franklin Wells,
President State Board of Agriculture.

DEAR SIR:—In behalf of the Farmers, Stockmen, Breeders, and Business Men interested in agriculture in Michigan, I have the honor to submit to the State Board of Agriculture, through you, the accompanying petitions, praying your honorable body to grant a full investigation of the charges against Prof. Samuel Johnson which led to the resolution requesting his resignation as professor of agriculture in the Michigan Agricultural College.

These petitions were prepared and circulated in compliance with the wide-spread sentiment among the farmers of the State, who feel a grave injustice is being done a worthy man.

Prof. Johnson's work in the Agricultural Department of the College, as business manager, director, manager of experiments, instructor, has been eminently satisfactory to the farmers of Michigan. They feel his labors have been of inestimable value to them. They are extremely reluctant that he be compelled to resign the work he has so long and ably conducted upon such insufficient evidence as has yet transpired, and the petition of a few disgruntled school-boys; and hence request your honorable body, in the interests of even-handed justice and for the good of agriculture, to grant their prayer for a complete and extended investigation—an investigation which shall disclose the root of this matter and fully exonerate or fully condemn.

The 1,668 names upon these petitions are those of practical men, the representative farmers of the State—men who appreciate Prof. Johnson's services and are not satisfied to lose them. Very many more names might have been obtained had time and opportunity served. Attached to these petitions are many personal testimonials to which I ask your attention.

I had expected to have presented these petitions to your honorable body in person, but am detained at my home by illness.

Hoping that the prayers of your petitioners may be granted, and a fair presentation of Prof. Johnson's case allowed, I remain, very sincerely,

ROBERT GIBBONS.
Editor MICHIGAN FARMER.

We submit that there is nothing unreasonable in the request thus laid before the Board of Agriculture. A man, against whom *no definite charges have ever been formulated*, nothing ever alleged which was, impartially considered, of sufficient weight to be grounds for a discharge, who only asks an investigation which will disclose facts, let the blame fall where it will, of whom even the Board speaks in terms of praise and commendation, is denied a right accorded the meanest man who ever stole a sheep—the right to know exactly of what he is accused and to defend himself! Moreover, when seventeen hundred of his friends join in the prayer he makes, they are treated with equal injustice and contempt. The newspaper through which a member of the Board assumed to state the reasons for Prof. Johnson's removal, named the petition of 172 students as good and sufficient cause. But the petition of 1,700 of Michigan's most widely known, most prominent and practical farmers, scores of whom have a State reputation, is a mere feather-weight! The inference is unavoidable that an investigation would disclose what it is to the interest of others to cover up!

Upon what grounds is this arbitrary action justified?

The *Detroit Free Press* and the *Lansing Republican* both quote Gov. Luce as follows:

"Gov. Luce said relative to the petition that it was a wrong assumption that the Board was bound to act only upon public judicial investigation, a theory which had been advanced, but that they are responsible to the State for the conduct of the institution; and bound to make only such investigation as satisfied their judgment as to the wisdom of retaining or dispensing with the services of any employe."

That is to say, the Board reserves to itself the right to discharge any man, no matter how maliciously he may have been slandered, no matter how false the accusation, "if its judgment is satisfied," and turn him away with blackened reputation, utterly unable to clear himself or gain redress! Such action savors strongly of the methods of the Middle Ages.

The Governor says the Board is responsible to the State for the conduct of the institution. Just so. And here are 1,700 of the men who constitute the State, the men for whose benefit the institution was established and is maintained, who are most directly interested in it and to whom the Board is by the above admission most directly responsible, tax-payers, too, asking the Board to kindly look into a little matter in their behalf, and getting a decided "Don't interfere, gentlemen, this is our affair exclusively!"

Gov. Luce is further reported as comparing the status of affairs at the College with a possible condition on the gubernatorial farm at Gilead; and saying that if he hired a man to conduct affairs and found the management unsatisfactory, he should discharge the man, who would have no right to ask an investigation. That might do—in the Governor's private affairs. But does the Governor mean to intimate that he, or the Board of Agriculture, own the College, and the professors are his or the Board's hired men? Do the said professors draw their salary from the gubernatorial pocket, or does the Board of Agriculture "put up" for the running expenses of the College? There seems to be a flaw in the simile, somewhere; it is not quite a happy one. Is it not nearer the truth to say that the Governor and the Board are the managers of a piece of property owned by a company composed of the voters and tax-payers of the State; and has not the Governor frankly admitted the Board's responsibility to the State, *i e*, the tax-payers? And if an employe is unjustly treated by the manager of a company, and asks reasonable attention to his grievance, by what principle of right or justice does the manager refuse the petition of those who placed him (the manager) in his office?

HOW THE BATTLE WAS FOUGHT.

There has been, among certain interested parties, a manifest wish to keep from the public as much as possible the disagreements and difficulties in the Agricultural College. Prof. Johnson has been censured by these parties for laying his case before the people through the press. But a man who is suffering misconstruction and misapprehension though convinced that the truth and right are on his side, is very apt to let daylight in upon his grievances, especially if he be of that calibre of intellect and integrity which leads him to scorn underhanded dealings, such as half truths, statements true to the letter but false in the spirit, and that perversion of truth which consists in careful selection of every damaging fact and the suppression of every extenuating circumstance or explanatory allusion.

Prof. Johnson has indulged, to the best of our knowledge and belief, in no insinuations or innuendoes. Whenever he has had occasion to make a charge against any person, he has named the individual. But this style of warfare does not seem popular with his opponents. As illustrating the methods of his adversaries, we desire to mention a certain anonymous circular, circulated from the College, and addressed to the Board of Agriculture. It purports to present the "other side" of the case, but has unfortunately no one to stand sponsor for it. While ostensibly representing "the Faculty," since it says, "We feel that some statement of the real condition of affairs should be laid before you" (the Board), and asserts, "The faculty have never consented to nor do they now propose to enter into newspaper discussion on the subject," it is a singular circumstance that, a copy falling into Prof. Johnson's hands and he asking several members of the faculty if they knew anything about it, each disclaimed any knowledge of such a paper having been prepared or circulated from the College.

The author of this precious "statement" is known. It is supposed that, in the haste of preparing the copy, and the necessity of remaining on the ground to watch that no copies would be likely to fall into the hands of Prof. Johnson, he forgot to affix his signature to the document, which, floating about, an unsigned waif, should be treated in the fashion generally accorded anonymous letters, and receive the profound contempt of the recipient.

Possibly the haste which led to the omission of the signature of the compiler is also responsible for the errors which have crept in, and the omission of many qualifying sentences and phrases which put a somewhat different complexion upon affairs. The author has also several times neglected to put himself on record in cases where he voted with Prof. Johnson, but has quoted the latter's vote as evidence against him (Johnson).

In response to Prof. Johnson's two specific charges, namely, that the faculty are opposed to the system of student labor at the College and seek to destroy it; and that the faculty fail to sustain discipline at the College and connive at disorder, this circular pretends to present all the official faculty records relating to student labor and discipline, and to show from it instances where Prof. Johnson's vote in faculty meeting has been against strict discipline and enforcement of laws relating to student labor. We have seen a copy of the faculty record relating to this matter and compared it with the alleged record as printed in the circular. A more ingenious—but alas, not ingenuous—tissue of matter selected and arranged to misrepresent and mislead we have never met. Just sufficient of the record was copied to sustain what was desired to be proven, the rest entirely ignored. The poet very truly says:

"A lie which is half a truth is ever the blackest of lies,
A lie which is all a lie may be met and fought with outright,
But a lie which is part a truth is a harder matter to fight."

Yet, will it be believed, Prof. Johnson's written request that the Board examine these faculty records and ascertain the exact truth from them, was denied!

Lard Adulterations.

Prof. H. W. Wiley, chemist of the Department of Agriculture, has issued a bulletin, fourth of a series on food adulterations, which discusses very fully the adulterations of lard. Prof. Wiley, after defining lard, cotton seed oil, stearine, etc., gives the properties, both chemical and physical, of pure lard. These, summarized, are the specific gravity, which is less than that of cottonseed oil, and the melting point, which is above that of the steam lards. Pure lard melts at about 40 degrees, and a wide variation from this point is suspicious. Chemically treated with iodine, there is a wide difference between the amount absorbed by pure lards and that taken up by the adulterants of refined lard. Under the microscope lard shows a definite crystalline structure, but does not plainly reveal the character of the crystals. The quantity of water in pure lard varies from a mere trace to .7 per cent.

Prof. Wiley then gives the properties of the various adulterants of lard—the stearines and cottonseed oil. In reference to other foreign matters, he says:

"It has been claimed that other substances than those mentioned have been used in the adulteration of lard, but these claims seem to rest on no valid foundation. Among substances, dead-hog grease or dead-hog stearine is the one most frequently mentioned. The term dead-hog grease is used to indicate the oil or lard obtained from animals which die of disease, or are smothered in transportation, or die on the way to the slaughtering houses. The fat of animals very recently dead, unless death takes place from disease, and taken before any decomposition sets in, has chemically the same characteristics as that derived from animals slaughtered. If, however, the animals have been dead some time before rendering a considerable decomposition of the glycerides takes place and the amount of free acid in fat is thus largely increased. Such fat also shows a distinctly unpleasant odor, by which it can readily be detected from genuine lard. Peanut oil and some other vegetable oils have also been mentioned as adulterants of lard. While it may be true that many attempts have been made to use the above substances in the adulteration of lard on a small scale, it is also quite true that such attempts have never attained any importance from a commercial point of view."

The total weight of cotton oil used in manufacturing mixed lard is estimated at 120,000,000 pounds a year. In conclusion, Prof. Wiley says:

"I have endeavored to set forth in the preceding pages our present knowledge concerning the constitution of pure lard and its adulterations. The question of the wholesomeness or the unwholesomeness of the various ingredients has not been raised in these investigations. It is hardly necessary to call attention, however, to the fact that the stearine and cotton oils used in the manufacture of adulterated lard are, so far as known, perfectly wholesome and innocuous. There is every reason to believe these are fully as free from deleterious effects upon the system as hog grease itself.

"A more serious question which is presented is the effect of selling adulterated lard as pure lard or refined lard. To do this is a fraud upon the consumer. Although it has been claimed by the large manufacturers of refined lard that the term refined is a trade-mark whose meaning is perfectly well known by seller and purchaser, yet it cannot be denied that the meaning of the word refined in the above sense is generally unknown to the consumer. The idea conveyed to the ordinary consumer by the word refined would be an article of superior purity for which he would possibly be willing to pay an increased price. It is gratifying to know that since the investigations recorded above were commenced the largest manufacturers of compound lard in this country have decided to abandon the use of the term refined, and to sell their lards as compound lard or lard compounds, and, in cases where no hog grease at all enters into the composition of the article, to place it upon the market as cottolene or cotton-seed oil product.

"In cases before English courts it has been shown that the word 'refined' does not convey to the judicial mind the idea which is claimed for it as a trade mark, and hence the wisdom of the manufacturers in changing the labelling of their wares is at once manifest.

"The extensive adulteration of American lards has afforded grounds to foreign countries for prohibiting importation of our production or of levying upon it a heavy duty. By requiring all food products made in this country to be labelled and sold under their true name we could secure for our products immunity from any such exclusion from foreign countries as is mentioned above. The right of foreign countries to levy an import duty on our products is one which we would in no measure seek to abridge; yet by the recognized purity of our exported food articles we should see that they secure a proper entrance into foreign countries. These remarks are not alone applicable to lard and its adulterations, but to all kinds of food products, whether they are to be consumed at home or abroad."

NEWS SUMMARY.

Michigan.

A soldiers' and sailors' encampment is to be held at Pontiac August 20–22.

About 3,500 bushels of berries have been shipped from Ann Arbor this season.

They have begun threshing in Washtenaw County, and about half a yield is the report.

The Coldwater Republican says threshing reveals considerable quantities of shrunken grain.

A combined cheese factory and creamery is to be built at Salem Station at once, to cost $6,000.

Active work has been begun on the extension of the C. & W. M. railroad from Baldwin to Traverse City.

The law forbidding the sale of tobacco to minors, passed by the State Legislature, became operative on the 8th.

The Clinton woolen mills are reported as doing a rushing business, and having all the orders on hand they can fill.

Alexander H. Dey, long engaged in the banking business in this city, and highly esteemed for his honor and probity, is dead.

M. T. Jones, Cass County farmer, banked in his barn, where he had $1,000 in cash on deposit. The barn burned. So did the money.

Miss Anna M. Chandler, of Coldwater, is superintendent of the Public Schools at Marquette, and has accepted the office for another year.

The prospects for a large crop of peaches and plums in Oceana County were never better than at present. At least so says the Hart Journal.

Len Feighner will begin the publication of a paper at Woodland, Barry County, about October 1st. Lord forgive him, for the inhabitants never will.

Another carload of horses was sent forward to the east from Mason this week. Eastern buyers seem to appreciate Mason as a good point to buy horses.

Wheat is light in Jackson County, and is reported as yielding poorly, and being badly shrunken in Lenawee. It is also reported as being under weight.

When the Lansing Republican threatened to advertise for sale its accounts with delinquent subscribers it meant business, and the list adorns a recent issue.

After four years of litigation the Harris Lake drain in Oakland County has been completed satisfactorily, and the people in the vicinity are consequently rejoicing.

Frank Porter, of Jasper, lost his life in a singular manner on the 5th. He was under the binder table of his reaper, making some repairs, when it fell, crushing him to death.

G. B. Stephens, son of Hon. Thomas Stevens, president of the First National Bank of Niles, was shot at Guthrie, Oklahoma, on the 6th, during a dispute over a land claim.

Notwithstanding Mrs. Peter Loomis, of Farmington, has reached the age of 86 years, she is to be found picking berries daily in company with her children, grand and great.

Mason Democrat: Addison Densmore, of Ingham, harvested 630 bushels of rye from nine acres of swamp land that was burned over last fall. The rye was pastured until the middle of June.

The State troops are encamped at Goguac Lake, near Battle Creek. The camp has been named in honor of Gen. I. C. Smith, of Grand Rapids, who had been in command of the State troops for many years.

Newton Clark, of Pontiac, mistook another man's farm for his own and cut the hay thereon, intending to appropriate it to his own use. He will have to explain to the circuit court how he came to make such a peculiar error.

Berkey, Gay & Co., of Grand Rapids, are putting up a new furniture factory which will be the largest in the city. The windows will be double-glazed, to make it easier to warm the building, and will require 23,596 panes.

Prof. F. W. French, for many years superintendent of schools at Chesaning, met with a painful accident at Owosso last week, by which he lost his right foot. He was walking on a railroad track and failed to get out of the way of an approaching train.

The Washtenaw County Agricultural and Horticultural Society has changed the dates for its annual fair at Ann Arbor to Sept. 17th to 20th, which is one week earlier than the dates previously selected. The dates for the Ypsilanti fair remain unchanged.

Rev. F. Mayer, a German Evangelical minister at Lansing, sent $2 to the Louisiana lottery early in July, and later was informed by the managers of the scheme that he had drawn $5,000. His conscience does not worry him a particle, in consequence.

Bay View is getting to be too eminently proper and correct to be comfortable. The sight of a celebrated Chicago divine, Dr. Gunsaulus, walking through the grove with a cigar in his mouth, just like one of the ungodly, sent a shiver of horror and grief through the Assembly.

The Lapeer Democrat says a citizen of that burg offered his son a quarter of a cent for every potato bug he would scoop in. When the lad showed up with 800 bugs as the result of his first day's work, he was paid his $2, but informed the tariff had been removed and set to mixing Paris green.

Concerning the wild reports about the existence of gas and oil at Portland, as indicated by oil on the river, &c., A. F. Morehouse, of Portland, says he thinks it very likely indications of crude petroleum will be found as long as a business firm he names there uses crude oil for fuel and stores it in underground tanks on the banks of the placid Looking-Glass.

Milford has ambitions to become a summer resort. Not being exactly "built that way" by nature, certain of the business men have planned to dam Pettiborn creek and make an artificial lake, having an outlet with a fall of ten or fifteen feet. This will make an attractive spot for picnics and camps, and at the same time benefit the water power of the village. Private subscriptions are expected to carry on the work.

Holly has claimed to have an insufficient supply of the vilest water a village ever suffered to enter its water-pipes for consumption. It has smelled so badly that people could barely endure to use it on their lawns. But a generous individual, Mr. G. H. Doane, has offered to pay $200 of the $425 which a drive well will cost, and there is a prospect that pure water will some day be supplied.

The managers of the coming State Fair are getting right down to business. One hundred and thirty-six men are employed putting the grounds and buildings into shape. Over $30,000 will be expended in improvements. The Holstein-Friesian Association of America has offered some special premiums of gold medals and cash, aggregating $550, one prize being $100 for the best herd of that breed.

A delegation of fruit-growers from Oceana County visited Milwaukee this week to investigate the methods and facilities for handling fruit, particularly peaches. The party numbered about 30, all interested in the subject at issue. The commission dealers met them and extended many courtesies to them, so that the impression made was favorable to both parties. Oceana County will ship 30,000 bushels of peaches this year, an excess of 10,000 over 1888.

The city council of Pontiac recently enacted an ordinance preventing the storage of more than ten barrels of oil at any one point within city limits. W. H. Osmun, who had fitted up his manufactory of brick, tile and sewer pipe so that he could use crude oil as a fuel, thus can't keep half a day's supply on hand. He owns some twenty lots in the city, and says he can either store ten barrels on each lot, at an added expense for cartage, and thus give everybody a smell, or he can establish his industry at some other point.

The new Manistee & Northwestern railroad now building is likely to prove a formidable rival to the C. & W. M. railroad. The line is now graded to within ten miles of Traverse City, and by the middle of October the rails will be laid. It has cost $475,000 so far, and its owners, Buckley & Douglas, will put $1,000,000 into it before it is completed. It runs through a very finely timbered section, whereas the territory tributory to the C. & W. M. is practically barren of timber from Baldwin to Traverse City, and not yet agriculturally developed. It has therefore to depend largely upon its passenger traffic.

General.

The hop crop of New York is reported materially injured by blight.

The captain of a steamship from Glasgow to Quebec reports passing 300 icebergs, 110 of which were visible to the naked eye at one time.

The sugar works at Topeka, Ks, were destroyed by fire on the 6th. This is regarded as a great misfortune to the sorghum sugar industry.

Another strike in the Connellsville coke region in Pennsylvania. Seventy-six coke plants and 14,000 ovens are idle. The men expect to conquer.

The new constitution of Montana contains a clause prohibiting judges, legislators and members of the board of equalization from accepting passes on railroads under penalty of removal from office.

The Oswego (N. Y.) woolen mills are under a cloud, being attached for $412,000 for a debt. This suspends the manufacture of goods for a time, and throws 1,000 hands, who earn $22,000 per month, out of employment.

The Agricultural College of the new State of North Dakota is located, by the committee on public institutions, at Fargo. An industrial school and school for manual training, with a grant of 40,000 acres, will be established at Ellendale.

Mexican officials have a summary way of quieting insubordination. The prisoners confined in a fort at Vera Cruz revolted, and the troops on duty at the fort shot twenty of them like dogs and thus quelled the uprising.

Twenty-five English glass-blowers who came to America under contract to work in the glass works at Jeanette, Pa., will either be sent back under the provisions of the contract labor law, or if this cannot be done in absence of direct proof of the existence of a contract, those who sent the men to this country will be punished.

California is to have a "brandy trust." An organization with a capital of one million dollars is to be formed, for the purpose of relieving the wine industries of the State by distilling surplus wines into good brandy. The company will buy two and a half million gallons of wine, which will be distilled into half a million gallons of brandy.

A new three-ton electric motor invented by David G. Weems, and tested at Baltimore

STATE AND DISTRICT FAIRS.

Name of Society.	Held at	Date.	Secretary.	Post-office.
Michigan Fair and Exposition	Jackson	Sept. 2 to 6	R. McNaughton	Jackson.
Michigan State Agricultural Society	Lansing	September 9 to 13	J C Sterling	Monroe.
Detroit Exposition	Detroit	Sept. 17 to 27	E W Cottrell	Detroit.
Eastern Mich Ag'l Society	Ypsilanti	Sept. 24 to 27	Frank Joslyn	Ypsilanti.
Northeastern Ag'l Society	Saginaw	Sept. 23 to 27	Geo F Lewis	SaginawCity
Southwestern Mich Ag'l Society	Three Rivers	Sept. 24 to 27	A C Titus	Three Rivers
Western Mich Ag'l Society	Gr'nd Rapids	Sept. 23 to 27	James Cox	Gr'ndRapids
Colorado State Ag'l Society	Pueblo	Oct. 4 to 9	H J Brunner	Pueblo.
Delaware State Ag'l Society	Dover	Sept. 30 to Oct. 5	D P Barnard	Dover.
Dakota Ag'l Society	Aberdeen	Sept 23 to 27	G Pierce	Bismarck.
Georgia State Ag'l Society	Macon	Oct. 23 to Nov 1	R A Nisbet	Macon.
Indiana State Society	Indianapolis	Sept. 23 to 27	Alex Heron	Indianapolis
Illinois State Society	Peoria	Sept. 23 to 27	W C Garrard	Springfield.
Iowa State Society	Des Moines	Aug. 30 to Sept 6	John R Shaffer	Fairfield.
Kansas State Society	Topeka	Sept. 16 to 21	E G Moon	Topeka.
Louisiana State Ag'l Society	Shreveport	Oct. 8 to 14	J J Horan	Shreveport.
Montana Ag'l Society	Helena	Aug. 26 to 31	Francis Pope	Helena.
Minnesota State Ag'l Society	St. Paul	Sept. 6 to 14	H R Denny	Hamlin.
Nebraska State Society	Lincoln	Sept. 6 to 13	Robt W Furnas	Brownville.
New York State Society		Sept. .. to		
Ohio State Society	Columbus	Sept. 2 to 6	L N Bonham	Columbus.
Texas State Fair and Exposition	Dallas	Oct. 15 to 27	C A Cour	Dallas.
Wisconsin State Society	Milwaukee	Sept. 16 to 20	T L Newton	Madison.
Ag'l and Arts Association	Guelph, Ont.	Sept. 9 to 14	Henry Wade	Toronto.
Central Fair Association	Hamilton, On	Sept. 23 to 27	C R Smith	Hamilton.
Kansas City Exposition	Kansas City	Sept. 24 to 28	W S Tough	Kansas City.
Northeastern Indiana Association	Waterloo, I'd	Sept. 7 to 11	M Kiplinger	Waterloo.
No. Ind. & So. Mich Ag'l Society	South Bend	Sept. 16 to 20	Chas G Towle	Mishawaka.
Omaha Exposition	Omaha Neb.	Sept. 2 to 6	J A McShane	Omaha
St. Louis Ag'l and M. Ass'n	St. Louis, Mo	Oct. 7 to 11	Arthur Uhl	St. Louis.
Tri-State Fair Association	Toledo, Ohio	Sept. 9 to 13	John Farley	Toledo.
Toronto Industrial Exhibition	Toronto, Ont	Sept. 10 to 20	H J Hill	Toronto.

MICHIGAN COUNTY FAIRS.

Brighton Market Fair	Brighton	Oct. 1 to 4	C E Beurmann	Brighton.
Fenton Union Society	Fenton	Oct. 8 to 11	W Blackmore	Fenton.
Fearnaught Driving Park Ass'n	Romeo	Oct. 6 to 11	H S Evans	Romeo.
Hadley District Society	Hadley	Oct. 8 to 10	H S Brigham	Hadley.
Ionia District Fair Association	Ionia	Sept. 17 to 20	K R Smith	Ionia.
Morenci Fair	Morenci	Sept. 17 to 20	C S Ingals	Morenci.
Milford Union Society	Milford	Oct. 8 to 11	Lyman Cate	Milford.
Plymouth Fair Association	Plymouth		C B Crosby	Plymouth.
Petersburg Fair Association	Petersburg	Sept. 30 to Oct 3	H Gramkie	Petersburg.
Stockbridge Union Fair Society	Stockbridge	Oct. 1 to 3	W C Nichols	Stockbridge.
Union Ag'l Society	Litchfield	Oct. 8 to 11	L B Agard	Litchfield.
Bay County Ag'l Society	Bay City	Sept. 17 to 20	W F Brase	Bay City.
Branch County	Coldwater	Sept. 23 to 27	J D W Fisk	Coldwater.
Clinton County	St. Johns	Oct. 1 to 5	Merritt Frink	St. Johns.
Calhoun County	Marshall	Oct. 1 to 5	J R Cummings	Marshall.
Eaton County	Charlotte	Oct. 1 to 4	Geo R Perry	Charlotte.
Hillsdale County	Hillsdale	Oct. 1 to 4	J Fitzsimmons	Hillsdale.
Ingham County	Mason	Sept. 25 to 27	L H Ives	Mason.
Livingston Co. Ag'l & Hort'l Society	Howell	Sept. 25, 26 & 27	Isaac Stowe	Howell.
Lenawee County	Adrian	Sept. 23 to 27	E L Mills	Adrian.
Lapeer County	Lapeer	Sept. 30 to Oct 2	F G Bullock	Lapeer.
Montcalm County	Stanton	Sept. 3 to 6	J L Lucas	Stanton.
Midland County	Midland	Oct. 1 to 3	H L Fairchild	Midland.
Macomb County	Mt. Clemens	Oct. 2 to 4	W A Rowley	Mt Clemens.
Oakland County	Pontiac	Oct. 1 to 3	H A Wyckoff	Pontiac.

Md., on the 7th, can maintain a speed of two miles a minute on a circular track, which is equal to three miles a minute on a straight track. Edison has pronounced it the greatest conception since the telegraph.

The number of cotton mills now in the South as compared with 1880, has been doubled, while the number of spindles and looms has more than trebled. From 161 mills having 667,854 spindles and 14,323 looms in 1880 this industry has increased until there are now 355 mills with 2,035,268 spindles and 45,001 looms.

The Shakers seem to be rapidly going to pieces. The community at North Union, O., have advertised their land, 1,375 acres, for sale, and will join the community at Dayton. The North Union Society when formed 30 years ago had 200 members, it has now but 35. The famous Oneida community's property is in the New York courts for division.

Immigration is setting toward the Argentine Republic from all quarters of Europe. The Argentine government extends aid to the new comers by paying their passage from the starting point to the interior, and in March last spent one million dollars in this manner. The Republic export's about two million tons of corn this year.

The U. S. revenue cutter Rush seized the British sealing schooner Black Diamond for taking seals in American waters, took charge of her papers, and put a seaman in charge of her with orders to go to Sitka. Of course as soon as the Rush was out of sight the captain of the Diamond took command and took his vessel to Victoria. The affair may lead to complications.

Nathaniel Chase, the "Millerite" whose predictions that the world would come to an end in 1844 caused so many of the faithful to prepare their ascension robes and dispose of their property, died recently. He has made many "time charts" since, and his latest prediction is that the end of the world will be in October of the current year.

Train robbers are perpetrating great outrages in the West. The Modoc train, on the Rio Grande Western, was held up near Crevasse, Co., and $900 in cash and 20 gold watches obtained from the terrorized passengers. They were not able to effect an entrance into the express car; and those of the passengers who were cool-headed enough to secret their purses, saved their cash.

J. Frank Collum, one of the leading young attorneys of Minneapolis, has confessed to forging the name of John T. Blaisdell, a millionaire who had befriended him, to notes and other commercial paper aggregating $237,000. It is thought Cullom's property will be sufficient to secure those holding the forged paper, and if they get their money, the culprit may be able to keep out of the penitentiary.

The requisite number of signatures for the opening of the great Sioux reservation has been finally secured. This throws eleven million acres of fine agricultural land into the hands of the government again. Sitting Bull refused to sign, and said the Indians who signed were "squaws wearing the clothes of warriors." It is predicted the rush to the reservation will be greater than that into Oklahoma, as the land is much better. If the stubborn Sitting Bull and his band take to the war-path, the reservation may not prove to be a healthy location for settlers.

Spokane Falls, Washington Territory, was visited by a terrible fire this week, which destroyed the entire business portion of the city. Thirty business blocks and the railroad station were burned over, only two brick buildings being left standing. The loss amounts to not less than $10,000,000, with insurance of not over one-fourth of that amount. The city will be rebuilt, and the city council passed a resolution prohibiting the erection of wooden buildings in the burned territory, so that when the city recovers from this blow it will be really improved and bettered by means of its great disaster.

A pleasure yacht of which the motive power was naptha, owned by L. B. Crocker, superintendent of the New York Central Stock Yards, exploded while lying at the boat house at Buffalo, where it was stored. Five lives were lost. The yacht was being prepared for a trip; and the intending passengers, Mr. Crocker's guests and his four children, were in the boat house or on the boat. Three of his children met a horrible death in the flames which speedily enveloped the yacht and boat house. John Rugenstein, a carpenter employed on the boat house, and the engineer also lost their lives.

The Standard Oil Company, not content with controlling the oil trade in this country, is reaching out for that of the old world. Russia has been the chief competitor, but this year it has got ahead of foreign capitalists and controls the American and European markets. It has bought up all the oil barrels and put them out of reach; it secured the pipe manufacturers and tied them up, then it secured the oil-carrying steamers. Russian oil is produced, but there is no way of putting it upon the market, and in consequence the oil product has considerably increased in price.

Foreign.

There are 4,968 miles of railroads in India under the control of the government of Bombay.

There is an insurrection in Crete, and the Moslems are arming against the Christians. Hundreds of refugees have sought safety in Athens, and the government has granted $300,000 for their relief.

It is decidedly dangerous to put one's finger in the political pie of the old world. A Frenchman named Boningere was sentenced to 12 years' imprisonment with hard labor, followed by ten years' exile from France, for selling political documents to German agents while an employe of the Danish minister at Paris.

The harbor of Marseilles, France, is one of the finest in the world. Twenty million dollars have been spent on it. Its jetties and breakwaters enclose an area of 955 acres. Its facilities for handling freight are a curious compound of new and old methods. Grain is handled in bags or baskets, poured on tarpaulins on the wharves and weighed by steelyards of the pattern of two hundred years ago.

Mrs. Maybrick, accused of poisoning her husband, and on trial at Liverpool, England, was convicted and has been sentenced to death. A stay of sentence is expected, as new evidence is alleged to be at hand, and public opinion is strong against the verdict. Even the judge who pronounced sentence refrained from expressing agreement with the verdict.

Poetry.

THE OLD HOME.

In the quiet shadows of twilight
I stand by the garden door,
And gaze on the old, old homestead,
So cherished and loved of yore.
But the ivy now is twining
Untrained o'er window and wall;
And no more the voice of the children
Is echoing through the hall.

Through years of pain and sorrow,
Since first I had to part,
The thought of the dear old homestead
Has lingered around my heart;
The porch embowered with roses,
The gables' drooping eaves,
And the song of the birds at twilight
Amid the orchard leaves.

And the forms of those who loved me
In the happy childhood years
Appear at the dusky windows,
Through vision dimmed with tears.
I hear their voices calling
From the shadowy far away,
And I stretch my arms toward them
In the gloom of the twilight gray.

But only the night winds answer,
As I cry through the dismal air;
And only the bat comes swooping
From the darkness of its lair.
Yet still the voice of my childhood
Is calling from far away,
And the faces of those who loved me
Smile through the shadows gray.

—*Chambers' Journal.*

I WONDER.

I wonder when my day will be,
When Death shall come to tell to me
The story that we all must hear?
When, with the silence drawing near
I feel my hold on earth so weak
My pale lips have no power to speak
Of anguish or of ecstasy.
Ah, lowly house the grasses under.
When will ye ope to welcome me
Your silent guest to be, I wonder?

I wonder if it will be spring,
When o'er my head the birds will sing
Their first sweet song not set to words?
And which of all the many birds
Will be the first to carol there,
When I, forever done with care,
Just like a child tired out at play,
Sleep all the night and all the day
So peacefully my green roof under.
Will it be autumn-time or May,
Winter or summertime, I wonder?

I wonder if I shall be glad
To leave the pain I long have had?
Or, if from friends who love me so,
But with reluctance I shall go?
Go out upon that journey long
So voiceless I shall sing no song.
Ah, chain of life's fair warp and woof
When will your bright links drop asunder?
When will I sleep beneath the roof
Thatched with the violets, I wonder?

—*Helen A. Manville.*

Miscellaneous.

MRS. MONTGOMERY SWIFT.

Miss Jessica Wynne had waving brown hair and merry dancing eyes, red lips always parted over small white teeth, a round waist and a bright, fresh complexion. She was barely 17, a perfect edition of the pocket Venus and the possessor of a fair fortune. These were her assets, against which stood the facts that she lived in a quiet country town, that she had neither father nor mother and had been since her babyhood the charge of a widowed, childless aunt. However, on the whole, the odds were in favor of the girl, who, being gifted with a fearless, independent nature, contrived to make the most of opportunities and as she grew up became the acknowledged belle of the country side. No country ball was deemed a success unless Miss Wynne was present. She was escorted to these festivities by some obliging chaperon, to whom Miss Polsover trusted her, sometimes for a couple of days at a stretch, with many recommendations as to propriety and deportment.

Finally Jessica was invited by some acquaintances, who had taken a great fancy to her, to spend two months with them in London immediately after Easter. The girl passed a week in a delirious joy of preparation and anticipation. She dreamed of triumphs which would eclipse those of the little country belle; of intoxicating delights, of parties, balls, theatres; of all the places she had read of in the society papers; and looking at her pretty face in the glass she even hoped that it might be her proud fate to see her name in print as "the lovely Miss Wynne" in some glorified paragraph.

Colonel and Mrs. Tressillian, her future hosts, were a fashionable, middle-aged couple, addicted to a good deal of wandering over Europe in quest of health and amusement, but generally occupied a fine house in South Kensington during the season, where they entertained liberally both their compatriots and foreigners, whenever they were not themselves being entertained.

Jessica Wynne returned to Wales at the beginning of July. If Mrs. Polsover had been observant she might have noticed a shadow in the laughing brown eyes, a certain compression in the scarlet lips. She vaguely observed that the girl was unusually reticent about her London experiences. "Yes, London was very gay—plenty of things going on, of course; lots of fine gowns, good music. Oh, yes, heaps of concerts, too many of them." "Had she enjoyed herself?" "Of course; how could she help enjoying herself in London during the season?" and answers to that effect.

The truth of the matter was that the popular little Welsh belle had been sorely neglected in London. She found, to her indignant dismay, that her beauty, wit and repartee remained unappreciated; with increasing choler she soon remarked that other maidens as fresh and fair as herself shared her ignominious obscurity. Her consciousness, which was not conceit, told her that she was sacrificed to rivals less fair, less clever, and, above all, less young; she realized that one and all of the successful queens of society were odious married women—fast, bold, exacting, tyrannical matrons, who monopolized the attentions of the men. She saw those unprincipled creatures surrounded by their courtiers at the play and at the races; they were asked to dinners, picnics and balls, and when poor little Jessica did get a card for a dance, the entertainment painfully reminded her of the breaking up festivities of her school, where the white frocks so hopelessly predominated over the black coats. Remembering all these things, the girl set her teeth hard, gathered her eyebrows into a resolute frown and vowed that if she had lost her first innings she would be even yet with the London world.

Miss Wynne had not forgotten her vow, or else fortune favored her. A year later Mrs. Polsover died, leaving half her money to faithful servants, the other half to Jessica, who became almost an heiress. When six months had passed, a little paragraph appeared in several papers containing the following intelligence:

"We understand that the beautiful Miss Jessica Wynne will, at the expiration of her mourning, return to society as the bride of Captain Montgomery Swift. This gallant officer, now on leave, will, however, shortly after the honeymoon be compelled to join his regiment abroad."

This announcement, shorn of local hyperbole, gradually found its way into the Birmingham and Manchester dailies, and finally drifted into one or two London papers.

Mrs. Montgomery Swift took a charming furnished house in Mayfair, kept a perfectly appointed brougham and victoria, procured her toilets from Paris and forthwith became the rage. Her gowns were copied, her repartees quoted, her five o'clock at homes crowded. She gave neither dinners nor parties, availed herself of a few of the introductions obtained through the Tressillians, who were abroad; with charming impertinence and pretty audacity dropped all the people she considered bores, and plunged into the maddest whirl of social dissipation. American girls gnashed their teeth with envy when the little "grass widow" carried off their most hopeful admirers, dowagers frowned, young matrons pursed their lips, mothers of marriageable daughters were bitter, but Mrs. Montgomery Swift heeded them not, and reveled in her popularity.

"Who the deuce is Captain Swift, and where does he hang out?" queried a guardsman of a fellow-warrior parting from Jessica, when she re-entered her carriage after her daily walk in the park.

"Who cares where the husband of a pretty woman is so he is absent?" was the flippant answer. "He's somewhere on the gold coast, or in India, or in Suakim, she tells me; he might be dead and buried for all I care—only it's much safer to know there's a husband somewhere, and, to do the little woman justice, although she flirts to the nines, she does drag the Captain in pretty freely; and even were he to mount guard over her like a watch dog he wouldn't find much to make a rumpus about."

For once the verdict of clubs, mess-rooms and smoking-rooms was just; Mrs. Montgomery Swift's morals were unimpeachable. Without ostentation she frequently alluded to her absent consort, retailed passages from his correspondence, bewailed the long exile and frequent changes entailed by his profession, wondered how long he would remain in those outlandish places where wives were an impossibility, and occasionally reduced her admirers to frantic despair by announcing her intention of joining Captain Swift wherever he might be sent next. When assured that such self-immolation would be madness she pensively concluded that perhaps it were wiser to await his return to civilization and England.

Sometimes—not very often—Jessica was alone, and then she would look at herself in the glass and smile quaintly. "Isn't it funny?" she murmured, scanning her features. "I am sure I am not quite so fresh and pretty as I was two years ago, and I don't think I am nearly as nice. And yet—then nobody even looked at me, while now—" Her eyes sparkled. "Oh, my blessed husband, what a service you have rendered me! And to think I shall never, never be able to repay you!"

Towards the middle of August, with the abruptness which characterized all her movements, Jessica, without a word of warning to her courtiers, accepted an invitation to spend a fortnight in Scotland with a young married couple who had taken a house on Loch Lomond for two months. She had not been told whether or not there would be other guests, but she knew that the Bullunes had the knack of making people comfortable, and she felt just a little tired of a surfeit of devotion, and inclined to escape from it and rusticate in comparative solitude. So one day she found herself at St. Pancras station, and when her maid had settled her in a private parlor car, with her books and dressing bag, she prepared for her long, solitary journey with restful satisfaction. However, just as the hour for departure had struck, the door of her compartment was violently opened, a military-looking portmanteau and case were thrust in, a guard exclaimed, "Plenty of room—just in time—jump in, sir—thank you, sir!" and slammed the door again upon a tall, handsome man, who had entered hurriedly, and who, as the train steamed out of the station, looked rather disconcerted in finding himself tete-a-tete with a young, pretty and elegant woman.

Before leaving Leicester the travelers had already exchanged a few commonplace civilities connected with the pulling up and down of windows, the loan of newspapers, etc. Instinctively they recognized that they belonged to the same social class; each discovered in the other a certain independent unconventional originality, and, like strangers meeting by chance at some dinner party, they soon began to converse on every possible subject.

"Do you propose stopping at Edinburgh?" said the gentleman when, after Normanton and lunch, they had resumed their seats.

"For the night, perhaps; but I am bound for Iversnaid," answered Jessica.

"Ah!" with a slight start, "I have some friends about there myself—relations."

"I wonder if they know my friends—at the Towers?"

"The Bellunes?"

"Exactly."

"Why Dora Bellune is my cousin, and I am on my way to see her."

"How very amusing! Well, I had an intuition that we were going to the same place."

A pause enused. Then he broke the silence. "I have just returned to England after a long absence. Among other objects of my present journey is to find something about a wife I have never seen."

"A wife you have never seen!" said Jessica. "You are not serious."

"Quite serious. I have had a wife in England, although I am not married.'

"A widower, then?"

"No, not a widower. I was married without my knowledge, by mistake, in default. The newspapers married me—I heard of it in India—and so persistently that I got a three months' leave only to make myself a free man once more. I left the P. and O. three days ago, and am on my way to the Bellunes to ask what they were about in allowing their nearest relative to be labeled all over the world as booked and done for."

"A hard case, and one deserving of much pity. So the indignity of wedlock has been put upon you. Accept my deepest sympathy."

"You may laugh, but it was, it is odious. All the fellows out there affect to believe it is true—that I am a derelict husband with a family. On landing here I found no end of letters of congratulation. I dare not show myself at the clubs. If at first I was inclined to treat the matter lightly now I am determined to sift the whole thing, sue the libelers, and give a public denial—"

"To the compromising accusation of matrimony? I would, if I were you."

"I shall," he said sternly.

They were just steaming into the Carlisle Station. Jessica remained alone while her companion smoked a cigar on the platform. She took advantage of the gathering twilight to rise, and unperceived, to examine the label on the hat box reposing in the rack. She found some difficulty in deciphering it, and fell back into the seat as the owner of it stepped once more into the carriage. He fancied she looked very pale, and asked her if she was tired. She did not answer at once, but as soon as the train was fairly under way she said abruptly: "Is your name Montgomery Swift?"

"It is," he said, surprised; but glancing at the hat box, which lay in an altered position, he added:

"Have you guessed that?" And are you a fortune teller?"

"You call yourself a captain?" continued Jessica, in the same strained voice.

"I do, till I become a major."

"Impossible! There is not a Captain Montgomery Swift in the whole British army."

"I beg your pardon. I am that humble officer."

"No, you are not; there is no such man in the army list—there was not a year ago."

"Possibly not at that time, for a year ago I was Monty Gordon. Last Christmas a good old man who was my godfather, died and left me all his fortune and estates on condition that I should take and bear his name. I complied. A Swift was manufactured out of a Gordon and yet remained a captain. Under either appellation, equally at your command. But now I must ask of your dressing-bag the same introduction furnished by my hat-box, and learn by what name I can address my travelling incognita when I meet her again at the Towers." He quietly bent over the flap of Jessica's neat Russia leather bag, but saw only the letters 'J. M. S."

"Ah," he said, "the same initials as mine;" then, interrogatively, "they spell?"

"Jessica Montgomery Swift."

A dead silence followed, Jessica lay back against the cushions motionless, with a crimson flush on her cheeks and forehead. Captain Swift felt that some painful mystery was about to be disclosed, and that the woman by his side was gathering strength for a great effort. He generously repressed every sign of curiosity and astonishment, and waited her pleasure.

After a few moments she turned toward him and spoke slowly and hesitatingly.

"I throw myself upon your mercy. Captain Swift, do not deny publicly to-morrow that you ever were married to Jessica Wynne. Do not pursue those who originated that—libel. Give me time. I assure you that I will do my utmost to undo what I have done."

She looked very young and fair, with her earnest eyes and moist lashes. "What have you done?" he said, simply.

"Listen to me, and forgive me if you can. When I first came to London, at 18, I found it a horrid place; only married women were admired, petted and courted—we girls were nowhere. So I made up my mind to come back to town—married; and as I had not a husband handy—they are too scarce, you know—I invented one. I thought I was quite safe. I wanted him to be an officer, because England has such a lot of troops in places people never go to. I looked all over the army and navy lists to make sure I did not choose a name belonging to any living man; I christened him Montgomery Swift, hap-hazard; I put the paragraphs in the papers. He was a very likely sort of a husband to have, you know, and it seemed so natural that he should forever be among the savages—anywhere. Nobody seemed to care about him at all; but they did for his wife, simply because she was not a girl, and it was all working beautifully. Oh, why did you turn up? Why did you have a Swift for a godfather? Why did he die?"

"Would it have suited you to keep up this farce much longer?" said Captain Swift, gravely, but an amused look passed into his eyes.

"Only a little while," said Jessica, promptly. "I intended becoming a widow very soon—some of the climates out there are so unhealthy—no one would have asked any questions. One accepts anything in London when it is convenient to be credulous: but if you are the horrid man please don't expose me yet."

"Not till I am dead, eh?"

"I can't make him out dead now," she said, petulantly; "but I will go away, hide myself, never show my face again."

"That would be a pity there must be some other way to achieve widowhood."

"Don't be cruel. It is dreadful and I know I have been very foolish. But really," she added, with a resumption of her old quaint coquetry, "I can't do more than ask your pardon."

"Yes you can; you can ask my advice," he said, extending his hand, "and, on my honor as a gentleman, I will help you to get out of this scrape."

They talked low and earnestly for the remainder of the journey. At Edinburgh they shook hands warmly and parted. But neither Jessica nor Captain Swift went to the Towers. Two separate telegrams informed Mrs. Bellune that her expected guests were unavoidably prevented from joining her party; nor did Mrs. Montgomery Swift again gladden the hearts of her faithful swains by her presence at the fashionable resorts of late Summer or early Autumn.

Three months later Jessica was walking on the seashore only a mile distance from a pretty village near Bagni di Lucca, looking as fresh, crisp and fair as before her first disastrous London campaign, only there was a new tenderness in the dancing brown eyes as she lifted them trustfully to those of a tall man on whose arm her small hand rested.

"And so you are really, truly, not sorry that you never denied your marriage with Miss Wynne?" she said, coaxingly.

"Not sorry at all, darling, as it saves me the fuss of communicating it now," answered Captain Swift. "I'm desperately glad, though, it's all settled and done with."

—*London Truth.*

DECIDED ECONOMY.

Mr. and Mrs. Blossom were new stars of a fine brilliancy, but of small magnitude, in the society of Warrensburg.

Alexander Blossom and Minnie Blossom had been married for one short year, which time seemed to them just one long summer's day.

There are several married people unlike Alexander and Minnie, for these were never happy except when they were together, and when they were together never unhappy for a moment. When Alexander came in from business he always instituted a search for the brown-haired, brown-eyed girl who was waiting for him, and when he began to despair she would start out of a certain passageway with a gay laugh and ask him where his eyes were.

Of course, under these circumstances, it was necessary for her to take a good, square look in his eyes to determine if they were the same as ever, and then occurred some of those manifestations which foolish people call foolishness, and which only stopped when the genial housemaid came to announce that dinner was served. Of course, the housemaid did not say: "Dinner is served;" her proclamation verbatim was: "Come now," but the meaning was the same.

I have omitted to say that Minnie was not very tall; that she was remarkably healthy and deliciously plump. Her lips were as near bursting from fullness as cherries after a rain; her forehead was low, and her eyebrows heavier than the ordinary, made her just so much more magnetic.

There was nothing wonderful about Alexander. You will comprehend Alexander at once when I say that he received $100 a month which he did not earn. However, he firmly believed that in some mysterious way his labor brought large returns to his employers.

With $100 a month the Blossoms had to live. Fortunately, they had no rent to pay; the market books under Minnie's care figured up reasonably, and the domestic was kind enough to demand but $15 a month.

One day Alexander came home from his alleged business, looking nice and sweet, and also looking for Minnie. The latter rushed out from the unexpected place in which she always hid, caught him around the neck, asked him where his eyes were, put a rapturous kiss just below his camel's hair mustache, and cried:

"What do you think?"

The sagacious husband implanted a rapturous kiss just below where Minnie would have had a splendid brown mustache had she been in that line, and he replied that he did not know. He also demanded advice as to what it was appropriate to think.

Minnie then explained that a letter had come addressed to him that looked like wedding cards; that she had—had opened it; and it wasn't wedding cards at all.

Some men, hearing of a mysterious letter opened by a loving wife, would have experienced a feeling of vague unrest. Not so Alexander. He silently weighed the merits of some hasty falsehoods and inquired bravely what the letter was.

"An invitation to join the Warrensburg Social Club," said Minnie, "and I have been thinking of it all the afternoon."

So she had, in her womanly way, she had been thinking what dresses she could wear. "Isn't it nice?" she cried. "Now, say we can go."

"Of course we can go."

The unguardedness of this answer was essentially masculine. Women, on the contrary, always begin by refusing, and afterward allow themselves to be argued into anything whatever.

"Then you must get a dress suit," said Mrs. Blossom.

These were, indeed, strange words. They conveyed the revolting idea that the fashionable Alexander had nothing in dress more formal than cutaways or Prince Alberts.

How, then, had he been married? The explanation throws light on a very dark passage in Mr. Blossom's life—his dress suit had been pawned; and worse, the time of redemption had expired.

"I can't go," he said, resigning himself to Fate with a large F.

"That's it," cried Minnie, delighted, "I've been figuring it all up and you can go."

Here she ran into the next room, and in one second returned with a sheet of legal cap bearing very illegal-looking figures.

"Now, look at this!"

Alexander looked; and I have to record that he was not shocked. The figures and their method were about as nearly like those of an ordained bookkeeper as Mr. Blossom's own.

"We've got to be economical for two months, you see," said Minnie. "There it is, all on paper."

The indisputable document ran thus:

"Grocer, $30; Jane, $15; butcher, $15; coal, $8; everything else, $10; altogether $78—$78 out of $100 leaves $22—say $20; two months, $40."

"One of those suits doesn't cost more than that, does it?" she asked confidently.

"Costs $75," replied the gloomy Alexander.

"Humph!" cried Minnie. "Can't you manage? If it were a $75 dress, $40 would be plenty.

Alexander shook his head.

"But the club meets early in the evening," persisted Minnie. "Couldn't you get one that would do—ready made, or something?"

Alexander was pained. He said he trusted she did not speak in earnest.

"Dear!" cried Minnie, in despair, "what can we do? We can't take boarders, and you can't be a book agent. I wish somebody would leave us some money."

" " murmured Alexander, with feeling.

"I know what," cried Minnie, with sudden brightness.

"Don't you ask your father for money," said Mr. Blossom, sternly.

"I don't intend to."

Alexander seemed to think she might have been a little more willful on this point. But he tried to look much relieved, and issued another command that she was not to go in debt. Her assent to this was immediate. Alexander had no more to say.

The next day Minnie, in pursuance of her idea, went by stealth to the clothing emporium of Warrensburg and demanded the price of dress suits. The answer was $75.

She then asked the price of the cloth. This was a great surprise to the tailor. He affected to solve an intricate problem, and finally coming out with a mathematical flourish of his pencil, said:

"Twenty dollars."

"How much for cutting out?"

"Well," said the tailor, "hem! let me see. You wouldn't want it made up here, you think? Well, coat, vest and—about $13.50.

"I should like to get the cloth and the cutting both for $30, if you could," said Minnie, faintly.

"Well," answered the tailor, patronizingly, "that's it; we couldn't. You can't get English goods, you know, at American prices. We have cheaper goods, but——"

"I should want this," said Minnie.

"Well, as the best figure on that I'll say $33. We don't make anything on it, anyway."

Mrs. Blossom was not deceived, but she pretended to be, and with another exertion of courage asked for a month's credit. Then she directed the cutting to be done by Alexander's measure, already with the tailor, and the next day carried her bundle in triumph to her dressmaker. That was her idea.

Her dressmaker, of course, was one of that infinite number of sewing women, found only by sheer good luck, who are called "jewels" by feminine gossips, and who charge two prices. They are said to be "reasonable" as distinguished from the real modiste.

According to immemorial usage among dressmakers, this particular "jewel" of Minnie's did not set a price, but she said it was a "splendid plan," that she would try, and that she would make everything "satisfactory."

What can be more satisfactory than satisfactory? Minnie departed in great spirits.

Time rattled on and brought the night of the club's first meeting.

The Blossoms' acceptance had been duly sent, and Alexander had been complacently informed that a dress suit would be provided.

He trusted to his wife implicitly, believing not that in two months she would create a wonderful novel, as ladies so easily do—in other novels—but that she would pursue the more useful and perhaps more womanly plan of calling on her father. Men are so tardy in conceding to their wives other than domestic virtues. But one man was about to have his masculine prejudices swept away.

The important night having rolled into Warrensburg, Minnie bade her dependent husband to "come up and get ready."

He went. The bundle was brought out for him to open.

It was a regular tailor's box (such was Minnie's craftiness) and lo! on the collar of the coat was the gloryifing name of a New York tailor. Minnie, of course, had obtained the name of her father and sewed it on with her own fair hands.

Alex, with a full heart, donned the suit and stood before the mirror. He cast two careful, comprehensive glances at the trim reflection, clasped Minnie to the new coat and exclaimed in many raptures:

"You darling! It's—it's the regular thing!"

"Are you satisfied?" asked the wife, wishing him to commit himself beyond retracting before she divulged the low origin of the suit.

"Of course," cried Alex, warmly, wishing he were a woman so that he could gush a little. "Satisfied? Why, it's one of Ackerman's best—that's what it is. See the way it fits. I could tell that was Ackerman a mile off."

When he had raved for ten minutes Minnie confessed the history of the suit. "So you see, after all," she said at last, "we women do know something."

Mr. Blossom looked at the coat more critically, trying to detect a blemish, but he couldn't.

"Are you still satisfied?" asked Minnie. He had to admit that he was.

"Now, how much do you suppose it cost?" Mr. Blossom couldn't tell. "Now a tailor,"—he began.

"Tailor!" cried Minnie. "You mean robber. I counted on just $40, and out of that I have this suit, which you say you like, and this dress of mine. You would have paid $75 for the suit alone. To-morrow I shall go and pay up, and I warn you that every cent I have left out of the $40 I shall spend on candy, every single cent." For Minnie had the woman's love of extravagance after all.

So this was Mrs. Blossom's triumph. Not a gentleman at the club was better dressed than her husband.

They were both in raptures, Alexander especially, when he had convinced himself that this suit did not proclaim to the world the discraceful truth that it had been constructed by a dressmaker.

The next evening when Mr. Blossom came home and instituted the search for Minnie, she did not leap out at him from her old, unthought of hiding place. She was in her room and crying.

"What is the matter?" asked Alexander.

She did not reply at first, but still kept her head from him, but when he had been wrought up to the proper state of sympathy and alarm she cried a little more bitterly than before, and unconsciously relaxed her grasp upon a piece of crumpled paper.

Alexander divined that this dingy scrap was the source of the trouble and picked it up. It contained atrocious writing executed in red ink, and looked like the work of a dynamiter. But it was not so brief. It began:

"Mrs. Blossom to Mrs. Darden, man Dress Suite," and after eighteen or twenty lines of trimmings, linings, buttons, extra cloth, making, etc., culminated in "totle $39."

Under this "totle" Minnie had written in trembling figures what she owed the tailor, $23, and then she had made a "totle" of her own. The dress suit had cost her $72.

"You hate me," she sobbed, "you'll think you've married a simpleton."

Alexander was not distinguished for a keen insight into human nature, but with so beautful and appealing a creature as Minnie in tears, who would not know the proper chord?

"Simpleton!" he cried, and distrusting the power of words alone, he seized her by the waist "sae jimp," and gleefully whisked her about the room.

"So you want a compliment on your financiering? You shall have it. You have got a thing worth $75 for $72; made $3 by simply turning over your somewhat dimpled hand. Simpleton, forsooth; you are a money grubber! Take me to the theatre, capital! and I will give you the supper afterward. Eh? What do you think of that?"

Minnie, flying from tears to smiles, foolishly thought Alexander more adorable than ever, and that evening, at the play, although it was a very fatal tragedy, they successfully maintained the highest spirits.

Better than all, when the story was related to Minnie's father, he—knowing how to strike the right chord—immediately presented her with a large check as a guarantee that her first charming futile efforts at economy were properly appreciated.

The Short Change Man.

Nearly everybody knows more or less about all the attendant features of a circus—the side show, the horse tent, the cooking tent, the dressing room, the red lemonade man and the peanut fiend. But not many people, even among the foxy old timers who have patronized circuses for forty years, know anything about the "short change" man. His victims are many, but they prefer not to trumpet their fishlike quality from the housetops. They swallow their chagrin and keep silent, while they economize in a number of ways to get even on the money that the short change man has taken.

A number of years ago I ran across one of the most accomplished short change workers in this country and got well acquainted with him. He didn't suspect me of being a newspaper man, and in the three months that I knew him I didn't enlighten him. He grew very confidential and chatty, and gave away to me the innermost secrets of his craft.

"Well, this is the way the boys take the money away from the suckers. You've noticed a lot of of hustlers in the crowd selling tickets and saving people the trouble of getting in the jam at the ticket wagon, haven't you? Well, you naturally think they are hired by the proprietor of the show because they sell tickets at the regular price. But they are not. They pay one hundred cents on the dollar for every ticket they sell, and they depend on their ability to swindle the buyers out of a few dollars now and then for their profit.

"A young man with his best girl comes along—or an old man alone, or a solid business man with two or three of his family; it doesn't matter who it is, they're all victims—and he sees a great crush around the ticket wagon. There isn't much chance of getting a ticket there in less than ten minutes, and here at his elbow is a young man with 'Choice reserved seats at regular prices! How many? We're here to relieve the rush at the wagon! No extra charge, sir! How many?' and he says: 'Two, please,' which, assuming that the man buys reserved seats, would be $2. He gives the young man a $10 bill or maybe $20—if there's any place on earth where a man will flash a big bill and where he hadn't ought to it's at a circus. We'll say he offers him a $20 bill this time for the sake of the better illustration of the story. The young man takes it, puts it into his pocket, draws out a handful of bills, takes a ten, a two and five ones and hands the lump to the buyer of seats. It is $1 short, but the man has handled it so quickly and counted $18 out of it so easily that oftentimes the man takes it and goes, but the fakir is sore if he does. If he is a cautious and knowing party who is 'dead onto' the tricks of 'these circus sharps' it suits the 'short change man' exactly, for then he will carefully count his change and say:

"'Here, young man! You're $1 short here. Only $17 here.'

"That's beautiful, and I just as the fakir wants it. So he says:

"'Sure of that? Just count it again, please.'

"So he counts again, while the fakir watches, and when he has turned over the last bill he says with the air of a man who knows too much to be cheated by these flip circus folks:

"'That's all—seventeen.'

"But the fakir is a little doubtful, so he says, as though wishing to make sure:

"'Just let me count it, please.'

"Serene in the belief that he has cornered his man, the buyer hands it over and the fakir takes the bills in his left hand, with the $10 bill underneath, straightens them out, and then bends the whole bunch back over his left thumb. Then he turns them over one by one, and they lie straight out, full length. When he reaches the last one he says cheerfully:

"'You're right—my mistake and your treat,' or some such amiable chestnut, hands the bills back to the man, still at full length, goes down in his trousers pocket with his right hand and gets a silver dollar, which he shoves into the stranger's hand, laughs, says something about 'mistakes will happen,' claps the man on the shoulder with a laugh, and is gone in the crowd, while the ticket buyer jams his money into his pocket and hurries into the tent where the elephants are bellowing.

"But the fakir has got the $10 bill, because when he doubled that over in counting the seventeen he flipped it clear over and his agile little finger crushed it into a very small wad and held it there unnoticed while the other fingers were free to use. And inasmuch as the 'sucker' has himself twice counted the bills, and has seen the fakir count them, he will swear that he has got all that belongs to him when he has compelled the fakir to go down into his pocket and fork out the silver dollar. He doubles up the bills without further examination and is gone.

"But the fine work doesn't end there. When the fakir laughingly claps his man on the back he puts a chalk mark on him which keeps all other fakirs away from him. He may try to buy red lemonade, or peanuts, or prize packages, or concert tickets, but he can't do it. The men he hails and beckons refuse to see him and pass him by. The reason is this: If they sell him something they might cause him to bring forth the roll of bills, in which case he would notice that the $10 was missing, and would be apt to raise a row. But if one of them should overlook the signal, and be instrumental in apprising the man of his loss, he is compelled by a rule among the fakirs to stand the loss and restore the $10, or whatever sum it may be. In case a man gives up a ten instead of a twenty the fakir only makes five, and if it's a five he probably only gets one. You see there must be enough bills left in the wad so that the absence of one won't be noticed."

—*Utica Observer.*

Bill Nye's Experience on a Shopping Tour.

After a visit to the Old South Church, I like to go around over the Hub and buy things. I hate to contrast any city with my own town, but a nervous person with a shrinking nature can do better and enjoy it better while shopping in Boston than in New York. The Boston merchant evidently bought his goods for the purpose of selling them to the consumer, while the New York merchant appears to have purchased them more for the wild excitement of looking at them himself. I always have my feelings hurt when I shop in New York. In the first place, I am enraged before I get to the store by 987,236 people, who knock me over and get on the elevated trains before the passengers can get off. Then I go to a store and wait near a stack of wet umbrellas until several total strangers with a haughty air jostle me against the wall. I next speak to a floor-walker, who plays that he owns the store, and is allowed to draw that instead of a salary. He looks at me askance, as if he feared that I might be Nellie Bly. He goes over to confer with a heavy-set saleslady to inquire of her, evidently, whether I am there with sinister motives, and while I am about to be searched for said motives, another man, who plays that he owns the store afternoons, comes along and asks me what I want there. I tell him that I am a simple-minded man, more or less picked on both at home and abroad; that I would spend an enormous amount of money in New York, if I had a chance; that to-day I had contemplated buying or trading for a full set of No. 10 English hose with double soles and a striking resemblance to each other. Nobody could be any more explicit than that without being offensive. I just tell a man what I want right at the start, and then if there should be any delay it is his fault.

He looks at me sorrowfully and begins to feel in his pockets for something. I say, "Put up your gold. Get out with your dross. I am not poor or crazed by suffering. I am only waiting to present a letter of introduction to the sock lady, if I can obtain an audience with her." He tells me where the office is, and I go there. She waits a long time before I seem to catch her eye. She looks through me, and so on across the store to a given point. She then says:

"Well?"

"Socks!"

"Yes?"

"Yes!"

"What kind, please?"

"English hose, double sole, unbleached, No. 10, two of a kind."

"For yourself?"

"Yes, exclusively for myself."

"Well, the men's hose is on second floor, facing the other street."

I then go to a hotel, register, get a room, ring for a messenger and send him for the hose.

An Anecdote of Stephen Girard.

Seeing a story about old Stephen Girard the other day reminded me of an incident that shows one of his peculiarities, says a writer in the St. Louis *Globe-Democrat*. Girard had a drayman who was a decidedly poor man. One day the drayman, who was an industrious, bright fellow, with a good many mouths to fill at home, was heard to remark that he wished he was rich. "What's that?" sharply said Girard, who heard the grumble. "Oh," said the man, "I was only wishing I was rich." "Well, why don't you get rich?" said the millionaire, harshly. "I don't know how without money," returned the drayman. "You don't need money," said Girard. "Well, if you will tell me how to get rich without money I won't let the grass grow before trying it," returned the other. "There is going to be a shipload of confiscated tea sold at auction to-morrow at the wharf; go down there and buy it and then come to me." The man laughed. "I have no money to buy a shipload of tea with," he said. "You don't need any money, I tell you," snapped the old man. "Go down and bid in the whole cargo and then come to me." The next day the drayman went down to the sale. A large crowd of retailers were present, and the auctioneer said that those bidding would have the privilege of taking one case or the whole shipload, and that the bidding would be on the pound. He then began the sale. A retail grocer started the bidding and the drayman raised him. On seeing this the crowd gazed with no small amount of surprise. When the auctioneer said he supposed the buyer only desired the one case. "I'll take the whole shipload," coolly returned the successful bidder. The auctioneer was astonished, but on some one whispering to him that it was Girard's man who was the speaker his manner changed, and he said he supposed it was all right. The news soon spread that Girard was buying tea in large quantities, and the next day the price rose several cents. "Go and sell your tea," said Girard to the drayman the next day. The drayman was shrewd, and he went out and made contracts with several brokers to take the stock at a shade below the market price, thereby making a quick sale. In a few hours he was worth $50,000.

THE AGRICULTURAL HOSS-TROT.

O! O!! O!!!
See them tramp to the cattle show!
The bugs have eaten the Paris green
And the small potatoes that grew between,
The hoppers hop on the dusty grass
In clouds as the farmers' wagons pass.

O!!! O!! O!
This is the way the dollars grow,
Less and less and few and small,
Into the farmers' hands they fall
For the biggest berries and finest fruit
And grain—and the greatest crowd to boot.

The judge gives fifty dollars in gold
For the fastest trotter that spurns the mold
And scatters the dust in the farmers' eyes
As he wins before them the biggest prize.
But never mind, the trumpet blow
For the fair and the races, farmers O!

—*American Garden.*

A BEAUTIFUL CAVERN.

Strange Discovery of a Farmer Near Findlay, O.

His Horse Breaks Through the Earth and a Subterranean Passage Is Disclosed—A Large Cave That Has Been Only Partially Explored.

About ten miles southeast of Findlay, O., writes a correspondent of the Chicago Tribune, lies a long stretch of limestone, which cropping out at various places serves to mark the dividing line between Hancock and Wyandot counties. At this point the limestone reaches its highest elevation in Northwestern Ohio and then dips rapidly away, not to appear again above the surface until it reaches the shores of Lake Erie on the north, and the Limestone river, near Springfield, on the south.

One mile south of this ridge of limestone is the beginning of what is popularly supposed to have once been a lake, from which the water has in some mysterious way been drained, leaving a sunken space varying in depth from ten to forty feet and ten miles long by three wide, over which the rank vegetation of perhaps centuries has grown, died and decayed, leaving a bog or morass.

A short distance from the marsh, and still further south, a wonderful cave has recently been discovered, concerning which marvelous reports have been put in circulation by the people living in the neighborhood. The entrance to the mysterious cavern was accidentally discovered by a horse breaking through a thin crust of earth while at work in a field. In rescuing the animal it was found that the hole into which he had partially fallen led down into some dark and unknown space, which gave back no echoing sound when substances were dropped into it. This aroused the curiosity of the farmer, Henry Greindle, who came to this city to relate the story of his wonderful find. A party of men drove out there and investigated the matter sufficiently to satisfy themselves that Greindle had actually discovered something much out of the ordinary in the cave line.

The farmer, finding a flood of people overrunning his premises looking for the entrance to the cavern, conceived the idea of turning his discovery into profit, and, manufacturing a rope ladder, he erected a tent over the yawning hole in the ground, and charged venturesome visitors ten cents each for the privilege of going down to the bottom of the cave.

The correspondent visited the cave and made as thorough an examination as it was possible. The distance from the top to the first landing is about sixty-five feet, and the passage is through solid limestone all the way, the aperture varying in diameter from three to thirty feet. The floor of the first resting-place is dry rock of an uneven character. This landing is an ante-chamber about sixty-five feet wide at the back. The wall is a solid rock clear up to the surface of the earth and about one hundred feet in length, when it forms the doorway or entrance to the main cavern. The main chamber has a dome-like roof of rock which rises gradually from all sides to an apex not less than fifty feet in height. The dimensions of this room, as near as could be measured, are 180 feet by 436. The floors are full of little hills and valleys, making walking in the semi-darkness—the only light furnished visitors being lanterns—exceedingly difficult and falls frequent. The roof of this part of the cave is dark, rocky and unbroken by any thing of a glittering character.

At the point where the chamber narrows there is a dark, deep fissure in the floor, beyond which human vision can not penetrate. This chasm, which is about twenty feet wide, has been bridged, and as one passes over he can hear the rippling of water beneath him. On the other side of this stream or river is a long irregular gallery which leads into another chamber, but not so large as the first. Here the roof and sides reveal stalactites in abundance, all resplendent in brilliant colors. Nothing indicating animal or vegetable life was found here or in any of the other apartments of the cave. Beyond this room is a lake of water, which in shape and contour of shore is a fac-simile, in miniature, of the sunken lake above. This body of water has been measured, and in many places is eighty feet deep. The water is clear, cold and placid. Not a ripple mars its surface. It lies there still, icy and dead, while above it is the stalactite-studded roof, and in and about it eternal silence. A small canoe is there to carry those who desire to venture the trip along the ragged shores for at least a quarter of a mile, where further progress is stopped by a solid wall of rock. This is the end of the cave. At least, no other opening or chamber has yet been discovered.

Numerous geologists have already written for full and minute particulars regarding its rock and crystal formations and a number have signified their intention of paying it an early visit, in which event it is likely that much of an entertaining and instructive character will be brought out. The country surrounding this cave, while having a limestone foundation, is comparatively level, and has none of the characteristics peculiar to the cave country of other localities.

A WHITE ALLIGATOR.

Some Mississippi Men Start Out to Find It and It Finds Them.

A large white alligator has been repeatedly seen on Mrs. Wardloe's place, five miles from Yazoo City, Miss., says the St. Louis Globe-Democrat. This is the only white alligator ever seen in the State.

About five years ago Mrs. Wardloe, who conducts a stock farm, missed several of her calves, and almost every day some of her stock would disappear. It was supposed at first that cattle thieves were at work and a close watch was kept. But the calves continued to disappear, even while the men were watching. One night the supposed thief was discovered crawling, as it was thought, on his hands in the grass. It was moonlight, and all that could be distinguished was a form moving from the swamp toward a calf. Suddenly it pounced upon the animal, and the men fired several shots at it with rifles and closed in around the form, when it was found that the calf-thief was a pure white alligator. The reptile succeeded in escaping to the swamp, and parties were organized to hunt it the next day. They watched for its appearance for a week, but could see nothing of it until one night about ten days after it was first seen. Several shots were fired at it without effect, as the range was evidently too long to hit the saurian in any vulnerable part. A great many have tried to kill it since that time, but none have ever succeeded, and the white alligator is still master of the swamp.

Before his appearance there were a number of ordinary alligators, but with the advent of the white one the others made themselves scarce, leaving him sole possessor of the territory. It is not known whether he has killed them or whether they fled at his approach. He has continued his depredations, however, among the cattle, and every possible means has been tried to effect his destruction, but without effect.

His size is unknown, as no one has ever been able to get sufficiently near to him to determine, except one luckless individual, who was too badly scared to measure him accurately and who thought he was about as long as a telegraph pole.

A party had been organized to hunt him and he was seen to leave the swamp and climb upon a log at some distance from the water. The swamp was surrounded and a man named Drew, armed with a trusty rifle, went between the 'gator and the marsh. The wicked saurian seemed to appreciate the situation at a glance and, throwing up his upper jaw, started for Drew at what seemed lightning speed. The hunter became the hunted. He forgot to shoot and did not have time to get out of the 'gator's way. He started on the run, but it was evident that he could never escape and his friends were horror-stricken at his impending fate when he suddenly disappeared and the alligator passed over him.

When the crowd became sufficiently nerved to look for the missing man they found that he had providentially fallen into the stock-well, which was at the edge of the swamp and was twenty feet deep. The hunter when discovered was standing up to his waist in mud and water, but was rescued by means of ropes without serious injury. Since that time the reptile has not been disturbed except at a distance, and bullets or slugs seem to have no effect on him.

Owing to his peculiar white appearance the negroes, it is said, entertain a peculiar regard for the alligator, and will not mention him except with superstitious horror. He is supposed to be a malignant spirit, and the negroes believe that he will never die and that it is impossible to kill him without drawing upon themselves the wrath of all evil spirits, who will revenge themselves by visiting them with all manner of imaginable horrors. Meanwhile the fact remains that the cattle continue to disappear and the reptile still lives.

THE BEST EXERCISE.

A Professor of Swimming Describes Its Good Points.

It Makes Society Belles Plump and Puts Muscle on the Dude's Legs—Advice to People Who Think They Are Drowning.

In a well-known athletic club half a dozen young men of stalwart build, while sitting at a round table, became interested in discussing the question of the best general training considered from the stand-point of hygiene. It was but natural that every athletic enthusiast should have his own theory. The base-ball devotee advocated work in the gymnasium, the canoeist debated in favor of the paddle, the boxer desired to illustrate the superiority of gloves, an oarsman was ready to meet all comers with the sculls, an all-round athlete was sure that a tour on the cinder track gave the best play to the muscles and lungs, a yachtsman declared that a sprinkle of salt water was highly conducive to health, and a bicyclist adhered to the theory that his machine kept him in perfect condition. Last to assert himself was a compactly built young man, who asserted that swimming was the best exercise from every point of view. The young man gave as his authority a swimmer who has had twenty-five years' experience as a general athlete. This athlete is Prof. T. P. Donaldson, of New York City.

Prof. Donaldson is about five feet two inches in height. He was born in a small town near London. In 1866 he won the short-distance swimming championship of England. At swimming and diving he has held many local championships in this country. He has dived from High Bridge, New York, and Westminster Bridge, London. Over sixty gold and silver medals have been won by him in various branches of athletic sports.

"Of all the sports I have engaged in," said Prof. Donaldson to a Sun reporter, "swimming I believe to be the best for the health. For a dozen years and more swimming has been my only exercise, and although I am engaged in a sedentary occupation all winter I am in pretty good condition. Feel my muscle."

The reporter, being invited, put his hand on Prof. Donaldson's biceps and on his thigh. They were as hard as boards.

"I find that swimming is the best physician I ever had," continued Prof. Donaldson. "I haven't had a doctor in ten years, and nothing is the matter with me. To what do I attribute my health? To salt water, in the first place."

"Is swimming difficult to learn?"

"On the contrary, it is very easy. But one thing is necessary—confidence. There was a curious example of this in my experience. Not long ago I taught a walloping big fellow, who must have weighed 250 pounds. He learned in two lessons. One day he wanted to jump off from a pier 100 feet from shore and swim to land. I thought he could do it, and I let him try, but I jumped into the water with him. For a few yards he swam famously, and then suddenly he got something like stage fright. He sputtered and kicked, and the more he kicked the further he got from land. I was thoroughly frightened, but I didn't let him know it. I couldn't have handled him if he had given up, he was so big. His hair was tightly cropped so that I could not get hold of it. All that I could do was to pat him on the shoulder and tell him he was all right, and then I put one hand under his chin to keep his head above water. He fell prostrate on the beach in a minute, utterly used up. If he had believed in himself he could have plowed along as well as I."

"Should swimmers eat before entering the water or after the bath?"

"Constitutions differ. There seems to be a notion prevalent that a bather should never go into the water before eating. While I would not advise bathers to eat immediately before going into the water, I believe from observing thousands of men and from a quarter of a century's experience, that it is debilitating to bathe for any length of time with no food in the stomach. Captain Webb used to eat a hearty meal shortly before going into the water. Of course, if you should eat a big, complicated dinner before bathing you would suffer the consequences. The length of time a person can, with benefit to himself, remain in the water, depends on his constitution. One thing is certain; if he does not feel well after his dip it is a sure sign that he needs a tonic, and in my opinion that tonic is continued sea bathing, taken moderately at first, and increasing the dose. For many bathers it is better at first to take a quick dip and then lie in the sand for an hour or two, enjoying a sun bath. Afterward the tonic of a sea bath may be enjoyed for a longer time."

"What is the best course to pursue in aiding people who are drowning?"

"Grab 'em by the back hair and hold them at arm's length. I've noticed one thing about drowning people. When they are sinking the first time if they see you and they rise again they know where to grapple with you, and the result is you both go down together, with a strong probability that you will be drowned. It is my advice that if you go to rescue a drowning person you should swim around him and keep behind him, so he won't see you when he comes up the second time. Another thing, when going to a person's rescue try to gain his confidence. It is a fact that one finger placed under a swimmer's body will keep him afloat if you can only get him to believe it."

"What is the best time for bathing?"

"Before breakfast or late in the afternoon. A glass of milk or a small cup of coffee should be taken if the bath is to be just after rising, and a sharp run afterward and a brisk rub with a towel will be of benefit."

"In your twenty-five years' experience how many lives have you saved?"

"Strange to say only one, and that was the life of a boy who had fallen off a pier. I don't believe half the reported life saving is true. Jobs are put up by the savers."

A DOCTOR'S DON'TS.

How to Preserve Health and to Relieve Suffering.

Don't Eat Pork—Don't Drink Green Tea—Don't Take Animal Food Oftener Than Twice a Day—Don't Read After Dinner.

From "Six Hundred Medical Don'ts," by Fred C. Valentine, M. D.: Don't give a child any sweets, except molasses candy or chocolate caramels, and these only very rarely.

Don't permit a child under five to remain out of bed after eight p. m., even if you have to forego your most sacred social duties or miss a most brilliant first night at the theater.

Don't nurse a child under one month of age oftener than every hour and a half.

Don't feed a child three months old oftener than every three hours and twice at night.

Don't conclude that a child needs food each time it manifests hunger. Try to assuage thirst by several teaspoonsful of boiled and cooled water.

Don't believe that your baby must be sick during its second summer; if you take proper care of it its second summer should be more satisfactory than its first.

Don't hold a child in convulsions in your arms, but strip it quickly and immerse it in a hot bath to which a tablespoonful of mustard has been added.

Don't allow a patient with colic to suffer until the physician arrives; give large injections (two quarts of warm water with ten drops—adult dose—of tincture of opium).

Don't seek relief for burns by the use of cold water; if nothing else is obtainable use warm water; better still, keep the part wet with sweet oil.

Don't lose your head when with cases of bleeding from the lungs; they very rarely prove immediately fatal. Prop the patient up in bed and give him small pieces of ice to swallow and a quarter of a teaspoonful of tincture of ergot every hour until your physician arrives.

Don't imagine that sunstroke (heat prostration) follows exclusively exposure to the sun. The same may be produced by excessive heat even at night, especially when the person is much fatigued.

Don't eat pork. When it is absolutely unavoidable to do so, it should be rendered harmless by being exposed to strong heat long enough to be converted into a decided gray color, even to its innermost part.

Don't drink green tea, and use black tea moderately.

Don't allow your servants to put meat and vegetables into the same compartments of the refrigerator.

Don't eat much meat, and increase its quantity only gradually when convalescing from a fever.

Don't take animal food more than twice daily.

Don't average more than twenty-four ounces of fluids daily.

Don't let your entire food exceed thirty-four ounces in twenty-four hours.

Don't infer that chewing tobacco is the most injurious method of using the weed; the contrary is true.

Don't smoke immediately after meals.

Don't forget that healthy persons generally lose weight in winter and gain in summer.

Don't wear dark clothes in very cold weather because of the readiness with which they eliminate body heat; the Russian and Siberian great coat is invariably of a light gray color.

Don't wear high heels; women who wear them publicly advertise the fact that they seek or wish to maintain serious internal troubles.

Don't mistake weight for warmth in clothing; feeble people may be worn down by heavy clothing and yet be less sheltered than those who wear light woolen fabrics, both as inner and outer garments.

Don't believe that one attack of a communicable disease protects against another. (The writer treated a gentleman, aged seventy-two years, who had two distinct sets of small-pox pits, and this third attack was of a confluent character.)

Don't read, write, or do any delicate work unless receiving the light from the left side.

Don't read in street-cars or other jolting vehicles.

Don't imagine that the eyes can be benefited by holding them open under fresh water.

Don't fear to open your eyes under salt water.

Don't attempt to clean the ears with any thing but the tip of the little finger.

Don't attempt to remove hardened ear-wax by picking it out. If you can not reach a physician when hardened ear-wax becomes troublesome or painful you may gently inject (preferably by means of a fountain syringe) large quantities of warm water, to each pint of which half an ounce of bicarbonate of soda has been added. This will convert the wax into a soap, which will run out with the water.

Don't administer baths to patients under 88 nor over 98 degrees, unless by special order to that effect.

"Don't read even the address on an envelope after dinner" (Spanish proverb, intended to urge absolute physical and mental activity after the principal meal of the day).

Don't allow yourself to grow habitually constipated. Coax intestinal action by regularity of habit, exercise, fresh and stewed fruits, and the avoidance of constipating food. Take drugs only under a physician's directions.

Don't endeavor to check a diarrhea suddenly.

Don't believe that eating fat will make you fat; quite the contrary holds true.

Don't eat gamey meats; remember that "gamey" is the hyper-refined word for rotten.

"Don't pour a mouthful of coffee into the empty stomach, even if you must tear a button from your coat and swallow it before," says an Arabic proverb. This applies to tea as well.

Don't drink coffee when suffering with a diarrhea.

Don't attempt to remove foreign bodies from the upper part of the windpipe by endeavoring to reach them with instruments of any kind. Try giving a violent blow on the back immediately after the accident. If this does not succeed have the patient held suspended by the feet, head downward, and moved rapidly from side to side while you strike between the shoulders with the palm of the hand; discontinue this at once if the patient shows evidences of suffocation; if these continue or the foreign body is not dislodged send for a physician to perform tracheotomy or laryngotomy as quickly as possible.

Wisdom of Rattlesnakes.

"You won't find malaria where there are rattlesnakes, but you will always find the home of this snake where there are the purest water, the freshest air, the dryest, highest land. That is why you always find trout where there are rattlesnakes. Such was the declaration of a gentleman from Clinton County. He did not attempt to give any scientific explanation of the fact, but affirmed that it was a fact all the same.

OHIO'S GRETNA GREEN.

Where Squire Beasley Has Tied Many Thousand Matrimonial Knots.

Sixty-five miles above Cincinnati by the windings of the stream, and bathing her feet in the beautiful river like a lovely maiden, writes a poetic correspondent of the Philadelphia News, sits Aberdeen, the Gretna Green of the West. The place contains about a thousand souls, while directly opposite rises the more pretentious city of Maysville, located on a high bluff, with the grand old Kentucky hills forming the background of a picture worthy the brush of an artist.

In the early days the popular squire was a remarkable man named Thomas Shelton, who officiated at more marriages than any other man that ever lived in the United States. He required no license, and for many years kept no records. Thousands of young people, whose parents were unfavorable to their plans, fled to the "old Squire" and found his services an efficient remedy for their misfortunes. The old gentleman for many years previous to his death had a peculiar passion for watches and knives, and if the prospective groom had not the requisite amount of money to pay for the marriage ceremony he would take a watch or knife in exchange, and when death claimed him he had in his possession over three hundred brass and silver watches and many old knives.

After the death of Shelton Massie Beasley was elected to fill the vacancy, and is now justice of the peace, having been in office a score of years, during which time he has married between 4,000 and 5,000 couples.

Squire Beasley is a well-preserved man for his age, being now seventy-eight years old. He has never married but once, but has had numerous proposals from "belles" of the Blue Grass region. His marriages never run less than one a day, and often go up to a dozen. Many persons from all parts of the United States have had their marriage rites solemnized here, but the majority are from Kentucky, Indiana and the Virginias. His fees run from $1 to $10, and he has several times been paid as high as $20, and one party from New York who came here gave him $40 in gold. In the winter time, when the river is full of floating ice, and it is considered very dangerous for any one to attempt to cross, a wedding couple may often be seen battling with the ice, and in some instances the loving ones have been carried several miles below the city before they could effect a landing.

Many thrilling stories are told of hot pursuit of irate relatives, of the crossing of the Ohio just in the nick of time, of the discharge of firearms and threats of vengeance and life-long enmity and all that sort of thing. The captain of the steamer Gretna Green, which plies from the Ohio to the Kentucky shores, is always on the alert to help the runaway couple. Just as soon as they are aboard he pushes out into the stream and no persuasion can prevail upon him to turn back until the knot is well and securely tied. There has recently been an attempt to stop these Gretna Green marriages, but it was fruitless, and the number is not diminished.

A CRIPPLE'S INDUSTRY.

How a One-Armed Man Built Himself a Comfortable Home.

On Highland avenue, Malden, stands a large and handsome stone house, which, having been in process of construction for the past four years, has at last arrived at completion, and is now pointed out by the inhabitants as a standing witness of what the skill and industry of one man, alone and unaided, can accomplish. The builder is a one-armed man, Mr. C. O. Blomerth, who has been a newsdealer in Malden for thirty-two years. When seen by a Boston Herald reporter he related the story of the work as follows:

"In 1886 I started to build a house, and, as I had previously built a small one alone, I determined to build a home for myself and family on which no labor but that of my own should be expended, and I have at last accomplished my task, the only help I have had being to have a man mix my mortar. The house is built of rough stone, of such a size that a single man could handle them, laid in red mortar, and is three stories high. The trimmings are of brick, and inside the stone-work is a complete wooden frame house. The roof is made of roofing paper fastened together with a composition of my own, which is also used around the chimney and in various other places instead of lead or tin. In the second year of the work, while busy near the roof, I fell a distance of thirty feet, and was so badly injured that I could do nothing more for a year. Of course, my one arm has been a severe drawback, but I have managed by various devices and a liberal use of nails to get along very well. I have built all my own scaffolding, and put in without help the roof timbers. I paint every thing thoroughly before putting it up, so that after finishing I have not had the trouble of stagings and ladders to paint high places. The house is large and commodious, and is filled with many odd little ideas of my own. It also contains some interesting relics; my front steps are taken from the Universalist church here, and are the same steps that I set up on that church thirty-five years ago, when I had two hands."

Mr. Blomerth is a Swede by birth, and came to this country thirty-five years ago. He lost his right hand thirty-two years ago in a mill accident, and since that time has sold papers in Malden. He is a bright, energetic man, and now that he has a home proposes to rest and enjoy it.

"DID 'OO KILL IT?"

Ludicrous Incident During Service at the Brooklyn Tabernacle.

Every seat in the Brooklyn Tabernacle was occupied the other Sunday morning, says the New York Press. The famous clergyman was in the midst of a most interesting sermon, and the ten thousand eyes of the congregation were riveted in interested expectancy upon the expressive face and gesticulative figure of the noted divine. The stillness of death, except for the exhortations of the pulpit orator, pervaded the huge edifice. Down in the center of the church, almost crowded out of sight by her older neighbors, a black-eyed little tot of four years nestled close to her mother's skirts.

The hairless pate of an aged worshiper loomed up directly before the bright eyes of the little miss. A common house fly circled around the child and finally alighted on the top of the old gentleman's head.

It stood motionless for a second and then moved softly over the smooth and shiny surface. The aged gentleman was deeply engrossed in Dr. Talmage's sermon, and for awhile evinced no uneasiness from the ticklish manners of the little insect.

All the while the child's eyes followed the movements of the fly. She was deeply interested, and looked around to see if somebody else wasn't enjoying the scene.

Suddenly the old gentleman's arm shot up, and came down with a resounding whack upon his cranium. The little one behind had been waiting for this, and sliding out of her seat before her mother could check her, she placed her chubby little hands on the old fellow's shoulders, and peering over into his face, unmindful of the time and place, asked with much animation: "Did 'oo kill it?"

Mormon Statistics.

The official statistics read at the last Mormon conference in Salt Lake City show that "the Church of Jesus Christ of Latter-Day Saints" has now 12 apostles, 70 patriarchs, 3,919 high priests, 11,805 elders, 2,069 priests, 2,293 teachers, 11,610 deacons, 81,899 families, 119,515 officers and members, and 49,303 children under 8 years of age—a total Mormon population of 153,911. The number of marriages for six months ended April 6, 1889, was 530; number of births, 2,754; new members baptized, 488; excommunications, 113.

BRACELETS FOR DUDES.

Bangles Locked with a Key Which Is Kept by Their Sweethearts.

The toilet of the really elegant young man is not complete now without one rather heavy gold or silver bangle worn on the left arm, and is usually concealed beneath the cuff, though occasionally an æsthetic apostle of the beautiful in masculine garb may be seen with the bracelet gleaming in full view on his delicate, blue-veined wrist. A touching spectacle, says the New York Sun, greeted the occupants of a Broadway car on one of the recent hot days when people had scarcely strength enough to bear up under its devitalizing effects. A stout, middle-aged country woman entered the car in comfortable and capacious sateen gown, brilliant in coloring and startling in design, and closely following her was a fragile, willowy, Elaine-like individual created in the semblance of man, and dressed in a costume as correct as an axiom, and as elegant as it was faultless. There were no winged insects fluttering in his vicinity. They formed a hollow square about him at respectful distance and knelt down and softly prayed. His clothing was of the most delicate pale gray serge, his linen as immaculate as an angel's vesture, his tie so fraught with tenderness that it brought tears to one's eyes, and on the left wrist close against the delicate, helpless hand, so white and weak like a sick baby's, there glittered a heavy wire of gold, capped at either end with a small gold ball. The stout, motherly woman had compassion on him, because she evidently thought him ill, and drew her voluminous skirts close about her to make room for him to be seated, but he shook his head in a weary way and hung up on a strap where every woman could see the bracelet and looked like a wilted lily on a broken stem.

Another very dudish individual about town wears a heavy silver braid in full view below his cuff. The latest caprice of lovers is to have one's best girl lock a bangle on his wrist, and keep the key where a woman always hides her jewels and carries her treasures. The younger boys who haven't any sweetheart to present them with this coveted trinket, are apt to borrow one from their sister, if she isn't cross, or from some one else's sister if she will loan it, and one chivalric young man who has fallen in love with his own mother wears one of her bangles beneath his cuff, and declares that all the boys do wear them, as knights of old wore a love token of their ladies' bestowing.

Bismarck and King Ludwig.

Prince Bismarck has not a very high opinion of the conversational powers of sovereigns and Princes regent in general. At the lunch which he gave to certain deputies and other distinguished visitors in Berlin the other day he was talking of King Ludwig II. of Bavaria. "He was a man of high intellectual culture," said Bismarck. "I once had a very interesting interview with him in 1863. His conversation was far superior to that of most Princes, which almost always is like this: 'How are you? How are you feeling? Have you ever been here before?'" Bismarck says that King Ludwig wrote to him eight days before his death, asking his advice and using these words, which will have a pathetic interest for future historians who recount the romantic episode of the suicide. "The legislative assemblies will not vote me the money necessary for my buildings, and when I can no longer build I can no longer live!"

Use of Cats' Whiskers.

Every one must have observed what are ususually called the whiskers on a cat's upper lip. The use of these in a state of nature is very important. They are organs of touch. They are attached to a bed of close glands under the skin, and each of these long and stiff hairs is connected with the nerves of the lip. The slightest contact of these whiskers with any surrounding object is thus felt most distinctly by the animal, although the hairs themselves are insensible. They stand out on each side in the lion as well as in the common cat; so that from point to point they are equal to the width of the animal's body. If we imagine, therefore, a lion stealing through a covert of wood in an imperfect light we shall at once see the use of these long hairs. They indicate to him, through the nicest feeling, any obstacle which may present itself to the passage of his body; they prevent the rustle of boughs and leaves, which would give warning to his prey if he were to attempt to pass through too close a bush; and thus, in conjunction with the soft cushions of his feet, and the fur upon which he treads (the retractile claws never coming in contact with the ground), they enable him to move towards his victim with a stillness greater even than that of the snake that glides along the grass and is not perceived till it is coiled round its prey.

Stretching Their Hair.

One of the queerest demands for celskins is that made by colored women, says the New York Star. The picturesque bandanas that they wear serve another purpose than that of merely covering their heads; they hide the celskins that these women wear to tauten and stretch their kinky hair. For, as long as white men have known the colored race, the latter has been imbued with a hopeless envy of long, straight hair, such as white persons are adorned with. Generations try to pull the kinks out of their woolly pates and fail, but other generations step into their places and try on and on to get long hair. White skins the colored folks don't care so much about, because they see that white folks, like Italians and Spaniards, are often darker than mulattoes, but they do envy the rest of creation its long locks. An old aunty, who had the care of a Sun reporter's child—a very pious old woman—said to the child's mother one day: "I'm sure of goin' to Heaven, but I'd give it up widout a sigh ef I could hab Miss Alice's long hair."

The Spider as a Traveler.

A doctor desired to send a fine specimen of the spider tribe to a medical friend who was exceedingly curious in the study of such matters. As the readiest means of transit, he inclosed it in a common wooden box, and dispatched the tiny traveler by express. The box, however, was too roomy for the spider's wants, and as he seemed to have disliked the jolting incident to traveling, he had recourse to a very ingenious remedy. Bees evince extraordinary sagacity in overcoming difficulties of form and situation, and spiders, it would appear, share to a great extent the same delicate and useful tact. Such at least is the inference we feel inclined to draw from the following fact: When the spider reached his destination and the consignee opened the box, he was equally surprised and delighted to find that his insect charge had spun for himself a superb hammock, securely hung from the four corners of his prison-house, in which he had couched, in sailor fashion, as softly as he does in his native lair.

Two Maine Snake Stories.

Here are two startling snake stories from Maine. The first comes from Waterville, where the post-mortem examination of a horse that died from unknown causes revealed in its stomach a "snake four and one-half feet long, with head and eyes perfect, six inches in circumference, and the color of blood with the exception of a white stripe on the back." Another snake came from the stomach of Mrs. Frank Kenny, of Portsmouth, N. H., who was in Biddeford under medical treatment. In August, 1866, at a camp-meeting in Alton Bay, she drank water from a brook, and afterward became ill. She was treated for cancer of the stomach, but stoutly insisted that something moved within her. The other day, by means of a powerful drug, "a light-colored snake twelve and three-eighths inches long was disgorged from her stomach, and she has gone home happy."

VARIETIES.

OFFICER ROONEY—Phwat was all that riot in your place this morning?

DIME MUSEUM MANAGER—The fat woman give the livin' skeleton a shakin' I believe.

Officer Rooney—Did she hurt the ould boy any?

Manager—No; she just rattled him a little, that's all.

YOUNG BADGER from New York, on the first morning of his visit to his uncle Abner's farm appears bright and early in a pair of white flannel trousers.

Uncle Abner (taking him aside)—Gee Whittaker, nephew, why in blazes didn't you tell me you was so poor! Here, boy, take this $3 and run down street to the store and buy a pair of pants before the women folks get up.

FLOSSIE is six years old. "Mamma," she asked one day; "if I get married will I have to have a husband like Pa?"

"Yes," replied the mother with an amused smile.

"And if I don't get married will I have to be an old maid like Aunt Kate?"

"Yes."

"Mamma,"—after a pause—"it's a tough world for us women, ain't it?"

COURTSHIP FOR REVENUE ONLY.—Merritt—I am afraid Cora's love for me isn't just what it might be.

Giles—That's nonsense, old boy. She fairly idolizes you.

Merritt—I don't know so much about that. I gave her a costly present last night, and before she thanked me she ran upstairs to show it to her mother.

PHILADELPHIA Stock Broker (at an out-of-the-way summer resort)—Larry, bring me the city papers, please.

Larry—Yes, sir; anything else, sir?

P. S. B.—Yes, Larry; you can bring me some cigars.

Larry—Yes, sir; anything else, sir?

P. S. B.—No—or, hold on, Larry, can't you go into the yard and yell, or do something else to liven this place up a little?

"Now, Gus," said a boy to his playmate, "we have got this dog in partnership, and half belongs to each of us. We'll call one end mine, and one end yours, and you can have just what end you like. "All right," replied Gus, "you can have the front end" (persuasively), "with the eyes, and the ears, and the mouth, and the collar, and teeth, or the rear end with just the tail." "I'll take the front end." "All right; you'll have to feed him, then."

THEY were in the conservatory at an evening party and there, amid the perfume of the roses and posies, he had fervently declared his passion. "Mr. Sampson," she responded, with womanly tenderness, "my heart has been wholly yours for months, and now," she went on, shyly taking his arm, "you may take me in to supper; I heard it announced when you first began those words of love which have so blissfully changed all the colors of my life."

A SPRINGFIELD woman, with an invalid husband who was not expected to live, thought she would take time by the forelock and engaged a dressmaker several weeks ago to make a full suit of mourning. This week the dressmaker received a letter stating that the looked-for event had not yet taken place, and the wife had decided to wait until the death of her husband, as she wished her suit made in the latest style. This cheeky postscript was added to the letter. "Please do not get discouraged about it. You will be sure of the job sooner or later."

Two ladies had an amusing experience in making a formal call at a house on Linwood Avenue the other day. The maid asked them to wait until she ascertained whether the persons inquired for were in. Presently she tripped down stairs and announced that the ladies were "not at home." One of the callers, finding that she had forgotten her cards, said to her friend: "Let me write my name on your card." "Oh, it isn't at all necessary, Miss ——," put in the maid, cheerfully, "I told them who it was." *Exeunt ambo*, with suppressed emotion.

I HAPPENED to be in the office of the *Mercantile Review and Live Stock Journal* on Wednesday last in time to hear one of the best reasons ever given for stopping a newspaper. A German boy entered, removed his hat, and asked: "Is Mr. Vepsder in?" "He is," replied Charles H. Webster, looking up from a mass of tissue live stock reports which he was winnowing. "Vell, Mister Bitters don't vant to take dot paber no more. He ves dedt last nide alretty." The name of the late Mr. Bitters, a cattle dealer, was duly erased from the delivery sheet.

CHANGE AS AN APPETIZER.—Mrs. Brown—Is this hotel on the European plan?

Mr. Brown (in preoccupied tones from behind his paper)—Yes, my dear.

Mrs. B.—I am not feeling hungry this morning. I think I'll merely take some coffee and rolls.

Mr. B. (laying aside his paper)—What were you saying, my dear? On the European plan? No; it is not.

Mrs. B. (to waiter)—You may bring me an omelette, some shad, mutton chops, with a bit of bacon, baked potatoes, rolls and coffee and afterward some griddle cakes and syrup.

FLEXIBLE FIGURES.—"You can have this property for $3,000 cash down. You couldn't build the house itself for less than $1,500," said the owner to the man who had come to look at it.

"I think I could," was the reply. "I built it two years ago for the man who sold it to you. I made a fair profit on it at $2,750. But," he added reflectively, "that is about as cheap as you can put up a house of this description."

"It is, is it?" exclaimed the owner, forgetting himself. "You just come with me to the next block and I'll show you a row of houses a thundering sight better than this that I'm getting built for $2,500 apiece!"

THE following is narrated as an incident of the Barnum season in Boston. The "Greatest Show on Earth" naturally drew to the city many people from the rural districts, and among the latter a couple of representatives of the Emerald Isle. These two wandered about the interior of the tents feasting upon the sights, and determined to see all that was to be seen. After doing the menagerie thoroughly, they came to one of the passages leading to the exterior, over which was the legend "Exit." "Begorra, Pat," said one of them, we mustn't miss the exit, whatever kind of a baste that is." They followed the index finger on the sign, and all too soon found themselves on the outside of the show, and denied the privilege of entering again unless they repaid the price of admission.

MRS. ELLA WHEELER WILCOX, the poetess, in a recent article on the manner in which men should make proposals of marriage, summed up with the sentence: "A wife, like a kiss, should be asked for with the eyes alone." "Experience" writes: "Permit me to say that Mrs. Ella Wheeler Wilcox writes great nonsense when she puts to paper the statement that 'with the eyes alone should man propose.' 'I have been there and I know what I am talking about. After long and unsuccessful efforts in the matrimonial market I am able to say, without fear of successful contradiction, that a good bank account will 'knock out' the best pair of eyes that mortal man ever had when it comes to proposing marriage to a woman. A cross-eyed man—or even a glass-eyed man—with $50,000 to his credit will win against the eyes of an Adonis with face and form to match."

A SUCCESSFUL HEAD MASTER.—The late Dr. Kennedy, professor of Greek at Cambridge, had remarkable success as head master at Harrow. Perhaps some light upon the secret of it may be afforded by an incident or two, related by a pupil. The lesson one day was a hard chorus in the "Antigone;" the edition before the doctor was, as it happened, Brunck's; the form was waiting, at the end of the lesson, for the head master's construe. But minute after minute passed without his uttering a word; his brow frowning and overcast, his teeth clenched, his eye rapt and absorbed, as he rocked himself uneasily in his chair. At last it could be seen that the light had dawned, the cloud passed away from his brow, and an expression of triumph beamed over his face, and he looked around exultantly on his prepostors: "This audacious Brunck has actually—inserted a comma." The other story illustrates the humanity and magnanimity which endeared Dr. Kennedy to all his pupils. On a certain first of April two boys, who had secured over night the key of the belfry, rang the bell for morning chapel an hour before the proper time, and had the satisfaction of seeing the head-master sailing into the chapel only [to find it empty. The culprits were forced to give themselves up, and appeared in due course before the doctor. The usual preliminaries of a flogging were all gone through; the culprits knelt bare-backed, and underwent all the agonies of anticipation. The doctor bent over them, and, with a merry twinkle in his eye, just said: "Get up, you April fools!"

Chaff.

Some people don't hesitate to "call a spade a spade." Others are not afraid to call a rake a gentleman.

A great many girls say "no" at first; but, like the photographer, they know how to retouch their negatives.

Only the first baby is favored with visits from the angels in its sleep. A little peppermint is what the others get.

Getting into a passion is a good deal like getting into a briar brush. The bush comes out all right, but you don't.

Sorrows of the Cross-Eyed Man.—"Miss, may I have the honor of the next waltz with you?" Two ladies (eagerly rising)—"With pleasure."

Mother—One of you boys have been stealing raisins again; I have found the seeds on the floor. Which one of you was it? Tommy—It wasn't me. I swallowed the seeds in mine.

When "Thirteen Ways of Popping the Question" can be bought at a book-store for ten cents, it is strange how much encouragement is required to draw one of these ways out of a fellow.

Obliging Porter (just as passenger has dozed off)—Ain't you d' Albany gent what wanted t' be waked up at five o'clock? Mr. Slicer—Yes. Obliging Porter—Well, hit wants ten minutes ob three, sah.

A Curiosity.—Polite Clerk (showing goods)—Here is something I would like to call your attention to, lady. It's the very latest thing out. Mrs. Rounder (absently)—If there is anything out later than my husband I'll take it, if only for a curiosity.

Lie 1. Time 11 A. M.—Mother—Now mind, Johnnie, there's a ghost in that dark closet guarding the jam! Johnnie trembles violently and commences to water at the mouth. Lie 2. Time 2 P. M. Johnnie—Oh, mamma! the ghost has eaten half the jam.

English Tourist (to American friend)—No, cawn't sleep in your Pullman coaches. Don't have such stuffy things at home, ye know. American Friend—Of course not. By the time you would close your eyes the train would be at the other end of your 8x10 island.

"I notice by the morning Office Cat that Sam Lung and Gue Lung, Mott Street Chinamen, were arrested yesterday and fined $20 for running an opium joint." Jaggs—"It appears, then, that opium smoking, besides being injurious to the nervous system is also bad for the Lungs."

First Boomer—You fellows have no git-up about you at all. Why don't you have photographs of your own town taken like we did? Are you ashamed of it? Rival Boomer—Naw, that ain't

The Dairy.

CONDUCTED BY T. D. CURTIS.

Good Cheese.

Really good cheese is a good thing, but poor cheese is an abomination. It is a fact that few people are competent judges of the quality of cheese. They know whether they like it or not, and when they eat poor cheese and don't like it, they too often come to the conclusion they do not like cheese anyway, and eschew it altogether. So far, as a rule, our best cheese has been sent abroad, and our poorest put on the market. It is seldom that really fine cheese is retailed at the groceries. This has discouraged consumption and worked great injury to the cheese interest. There is need of cultivating the home market, by supplying it with cheese to suit the palates of consumers.

Hence we are glad to see that Wisconsin is making another effort to improve the quality of her cheese, and hope she will be successful. But past experience is discouraging. Makers are self-conceited and self-willed, and not disposed to adopt new practices—unless they can thereby get rid of work. If they attempt to follow new instructions, they will omit important things and then charge the bad results to the new practice.

The present instructor, Mr. W. F. Jones, appears to understand his business. He says, "I have visited nearly all the factories in three counties, and find but few cheese above the common stock. The cheese are open and flabby—no body to them; and they persist in following the old way of souring the curd in the whey, putting it to press as soon as they can get the salt stirred in, and going off for a good time." We can testify to this as literally true in the past, and applicable to a much larger territory than the three counties visited by Mr. Jones. We have left them with sweet curd in the 90's, telling them to let it become distinctly acid and cool it to 80 degrees before putting it to press. Returning in half an hour, we found they had put it to press and had the hoops out adjusting the bandages! We hope Mr. Jones may be more fortunate.

His teachings we believe to be generally correct, though he does some useless but harmless things—such as stirring the curd with his hands, and cutting it with a horizontal knife, which we soon found of no practical use at all. He does well in using rennetine or commercial extract. We found home prepared rennet generally abominable. In a letter to one of the papers, he says: "When the whey is cooked out of the curd, or when it shows a fine thread on the iron of ⅜ to ¼ inch, draw off all the whey. Use racks made of common lath (smoothed, of course) nailed on slats, in the bottom of the vat. Spread a thin cloth over them and with a tin pail dip the curd upon them, so as to let every particle of whey that will drain out. Cover up and keep the curd warm to about 96 to 98 degrees. Turn it over once in every 20 minutes, to keep it all warmed alike. Let it lie on the racks until it will mellow down and string on the iron from two to three inches, fine as silk. Then it is ready for the mill." He is lucky to find mills. Five years ago there were not half-a-dozen mills in the State of Wisconsin. After grinding he salts with two and one-half pounds of salt to 1,000 pounds of milk, and "when the curd begins to feel mellow and soft," he puts it to press.

This will make a fine cheese every time—provided the milk is all right to start with, and a bad curing-room does not spoil it. But 94 to 95 degrees, which he recommends, is too high to safely put a curd to press at in warm weather. We would not like to risk it above 80 to 85 degrees.

Can Mr. Jones get cheesemakers to take pains to follow his instructions? If so, he will be successful, provided he is not defeated by bad curing-rooms. With a temperature ranging from 70 to 90 degrees and above, there will always be trouble. It should be kept steadily at 65 to 70 degrees.

Grain Feed in Summer.

The general impression is that dairy stock needs only the grass of the pasture in summer. Of course a good deal depends on the quality of the pasture. Some afford much richer feed than others. But it stands to reason that some dry food in summer, for animals as well as men, is not only relishable but conducive to health. Many by experiment have found that it pays to feed meal in summer. Col. F. D. Curtis, of Charlton, N. Y., says he has found that giving his cows an extra feed of wheat bran in summer increases the quantity of milk and makes a better quality of butter. He feeds at night four quarts of bran with one quart of cotton-seed meal. He puts his butter up in three to ten pound packages, and delivers it to special customers in Schenectady, for 30 cents a pound the year round. That he has extra cows, appears from the yield—seven pounds of butter from 100 pounds of milk. He used to be satisfied with six to six and a half pounds, but now succeeds in getting seven by not mixing sweet and sour cream and taking extra care in ripening his cream for the churn. But this question of feeding grain in summer is one that each dairyman must decide for himself. Some appear to find it profitable; but in most if not all cases we note that they have superior cows. It might not pay to feed grain or much of anything else to poor cows. A little experimenting ought to settle the question—and it is not a very wide-awake man, in these days, who does not experiment. Mr. W. H. Gilbert, of Richland, N. Y., feeds shorts in summer. Then beginning in September to feed four to five pounds of cotton-seed meal and wheat bran mixed, he says, "I can bring my dairy to give me a pound of butter for every twelve pounds of milk." His cows, it will be seen, must be extra, and readily respond to good feed and treatment. In winter, he feeds about five pounds of hay, and 35 pounds of corn ensilage, with five to seven pounds of cotton-seed meal and shorts. This is strong feed, but he finds it pays.

Brine Salting.

Salting butter with brine is a nice, even and easy way of doing it, provided it is done right. The butter must be in a granular form, and the finer the granules are, the evener and more thoroughly will it salt. But many fail because they are not careful enough to have the brine saturated—that is, contain all the salt the water will dissolve. They fail in two ways—first, because they do not make a saturated brine, to begin with; second, because they do not take into account the fresh water left in the butter from washing. This therefore dilutes the brine that is added for salting, and the butter, having only a weak brine in it and too much water in order to have brine enough to give it the requisitie saltness, does not keep well. An allowance of salt must be added to the butter, before or after brining, to make a saturated brine of the water left in it by washing. This must ordinarily be reckoned at 15 to 20 per cent., if the butter is firm and in fair condition. In 100 pounds, there will be 15 to 20 pounds of water. This will take up a little over one-third of its weight in salt—say, five and a quarter to seven pounds. Water at 60 degrees dissolves about 36 per cent. of salt by weight. Boiling water will take up 40 per cent. So, in brine-salting, calculation must always be made for the water already in the butter before the brine is added. With this precaution, brine-salting with saturated brine made of pure salt will be satisfactory. But it is just as well, and we think less trouble, to stir in salt enough to saturate the water in the butter, and then work out what brine will naturally run out while pressing into a solid mass. This saves making brine, and also some waste of salt from the excess of brine required in what is called brine-salting. By either method the butter is salted with brine, and evenly salted, if the stirring of the salt into the granulated butter is carefully and thoroughly done. It is not necessary to float the butter in brine.

Cheap Talk.

"You can just as well have a good cow as a poor one, as it takes only one minute to kill a poor cow," said a speaker at a recent meeting of dairymen. This is true as to the killing of the cow, but how does it substitute a good one? It takes a good many minutes to produce a cow, and when you have produced her she may not be a good one. By killing the poor cow, you are simply left with no cow, and there is one cow less in the world. This may be an advantage in some cases, where the cow is very poor, yielding no profit. But most people would prefer a poor cow to no cow—especially if it were a family cow. The problem of getting the good one is what puzzles most dairymen. Every one would prefer such a cow, but how is he to get her? Cows are not ready-made, by any means, nor readily made. Enough good cows are not in existence. To kill all the poor cows would not increase the number of good ones, but it would increase profits to kill off all cows in the dairy that do not pay for their keep. It is only by long, steady and patient work in breeding and selecting from the best blood to be had that dairy stock can be improved. It is not as yet, by a long shot, "as easy to have a good cow as a poor one"—at least not for everybody, although it is easy enough to get rid of the poor one. Yet everybody should strive to get the best, as is usually done. But common sense should govern in this as in other things. Before taking the minute to kill the poor cow, which you can get along with tolerably well, it may be worth while to consider the fact that, beginning *ab initio*, it takes about three years to make a two-year-old heifer, and ask yourself what you are going to do in the interim. Yet we have faith in improved stock.

Temperature in Churning.

At a New York State dairy conference, Mr. W. H. Gilbert said, "it is almost impossible to churn cream from any two dairies at the same temperature." In this, he struck the key-note to churning. There is a difference in dairies as well as in individual cows. The speaker said he churned at 68 degrees, in 18 minutes, while a neighbor did his churning at 62 degrees, in 20 minutes. Major Alvord places the range of churning temperatures from 55 to 68 degrees. Some dairies require one point and some another between these extremes. Every dairyman must decide for himself, by his own thermometer. The time of year, the distance either way the cows are from calving, the feed, the breed, and other conditions, perhaps some not known or thought of, may vary the required temperature for churning. Too high a temperature makes the butter come too soft, and too low a temperature makes "slow churning," and perhaps imperfect separation of the butter from the milk. There appears to be a medium point where the butter globules are just soft enough to cohere readily. This is the point to be aimed at. And care should be taken not to have the temperature rise or fall while churning. Sometimes people begin at too low a temperature and churn and churn until the temperature gets up to proper churning point and the butter at last "comes." Slow churning indicates something wrong. Be careful about the temperature.

Hasn't Heard the News.

One of the latest dogmas in dairying is that there is no such thing as a "cheese cow." No matter how little fat there is in the milk, this must decide its value for cheesemaking! Or, it may be very rich in fat, but the globules so small that they will neither rise nor churn. Still it must be devoted to buttermaking, as there is no such thing as a "cheese cow!" Evidently Prof. J. P. Shelden, the English authority, has not yet heard of the dairy millenium. He recently said: "We may admit indeed the Ayrshire cow to be the best cow in existence for *cheesemaking* purposes." He is as ignorant of the new decree as the hounds in the fable were of the millennium! Still we think Ayrshires and Holstein-Friesians make very good cheese cows.

Fatal Accident.

A terrible accident occurred at Buffalo last Wednesday, the details of which may be briefly stated as follows: Mr. Leonard B. Crocker, superintendent of the New York Central stock yards, with his family of four children and his sister-in-law, Miss McLane, went to the foot of Ferry Street to board his naptha launch, the Cedar Ridge, for a trip down the river. Before the boat was out of the house the engineer, Peter Goldmeier, lighted the fuel. Two explosions followed, resulting in the death of Lemuel Leonard Crocker, aged nine years; Ethel Grace Crocker, aged eight years; Howard Bruen Crocker, aged four years, and John Rubenstein, who was working in the boat house. Charlotte Crocker was so badly burned that her recovery is extremely doubtful, and Miss McLane's injuries are of a serious nature. Mr. Crocker, his coachman and the engineer escaped with slight injuries.

The party had arrived at the boat-house at the foot of Ferry Street, and the three young children—Lemuel, Ethel, and Howard—with the coachman, had entered the boat. Mr. Crocker was in the act of stepping in, and Miss Charlotte Crocker and her aunt, Miss McLane, were standing by, when a terrible explosion occurred, setting fire to the boat and its house. The three children in the boat were killed outright; John Rubenstein, a man in the loft above the boat, was also killed; Miss Charlotte was stunned and frightfully burned and was thrown into the water, and Miss McLane, in her endeavor to rescue her, was also badly burned. Mr. Crocker and the coachman were both stunned, but not seriously injured. Miss Charlotte and Miss McLane were immediately removed to the Homeopathic Hospital, and are in a critical condition, though hopes are entertained for their recovery.

Mr. Crocker was for several years superintendent of the Michigan Central Stock Yards in this city and has many warm friends among the stockmen throughout the State who will deeply sympathize with him in his sad bereavement.

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, August 9, 1889.

FLOUR.—Flour has declined during the past week. Quotations on car-load lots are as follows:

Michigan roller process	3 90	@4 00
Michigan patents	4 40	@4 50
Minnesota, bakers	3 75	@4 00
Minnesota, patents	5 60	@5 70
Rye	2 75	@2 85
Low grades	2 25	@2 50

WHEAT.—The market has gained a little this week especially on No. 1 white. There is also a little better feeling in futures. Closing quotations to-day were as follows: No. 1 white, 84c; No. 2 red, 79c; No. 2 red, old, 82c; rejected red, 56@65c. Futures closed with No. 2 red for August at 78¾c and September unchanged at 78½c. For No. 1 white, 80c was bid for August and 81c for September.

CORN.—Dull, steady and unchanged. No. 2 quoted at 38c ℔ bu. for spot, and 38c for September delivery.

OATS.—Quoted at 26c for No. 2 white, 23½c for light mixed, and 22c for No. 2 mixed. Market weak at a decline from last week's figures.

BARLEY.—Quoted at $1 25 per cental for No. 2 September.

FEED.—Bran quoted at $10 50@11 00; and winter wheat middlings at $10 50@12 ℔ ton.

CLOVER SEED.—Sales for October were made at $4 37½ ℔ bu; for November, $4 45 is asked.

RYE.—Nominal at 45c per bu.

BUTTER.—No fancy dairy in the market. The range for fair to good dairy is 12½@13½c ℔ ℔.; choice 1@2c higher, and for creamery 14@17c ℔ ℔.

CHEESE.—Quoted at 9@9½c for Michigan full cream. Market quiet.

EGGS.—The market is steady at 12@12½c for fresh receipts.

HONEY.—Quoted at 13@15c for new, and 11@13c for old. Market dull.

FOREIGN FRUITS.—Lemons, Messinas, ℔ box, $5@5 75; oranges, Messinas, $5 00@6 00 ℔ box; California, $4 00@4 50; bananas, yellow, ℔ bunch, $1 25@2 50. Figs, 11@12c for layers, 15@16c for fancy. Cocoanuts, per 100, $4 50. Persian dates (new), 5¾@6c ℔ ℔. by the box.

SALT.—Michigan, 80c per bbl. in car lots, or 85c in 10-bbl. lots; dairy, $1 80@2 10 per bbl.; Ashton quarter sacks, 72c.

HIDES.—Green city, 3½c ℔ ℔., country, 4c; cured, No. 1, 4½@5c; No. 2, 2½@3c; calf, No. 1, 4@4½c; No. 2, 3c; veal kip, No. 1, 3c; runners and No. 2, 2½@3c; sheepskins, 50c@$1 25 as to quality of wool.

HAY AND STRAW.—Timothy, No. 1 per ton, $11 50@12 50; No. 2, $10@10 50; clover, $7@8; mixed, $8@8 50. Wheat and oat straw, $6@7 per ton. These prices are for car-load lots.

BEANS.—Quoted at $2 10@2 20 per bu. for city picked mediums.

POTATOES.—Active at 35c per bu in car and $1 15@1 25 per bbl out of store for Early Ohios. Michigan stock is hardly ripe enough for handling.

APPLES.—Southern fruit sells at $1 75@2 75 ℔ bbl, Maiden Blush bringing the top figure. State stock is dull at $1@1 50 per bbl.

POULTRY.—Live quoted as follows: Old roosters, 4c; fowls, 8@9c; spring chicks, 9@10c ℔ ℔.; ducks, 7c for old, 8@9c for young; turkeys 10c.

ONIONS.—Dull at $2@2 25 ℔ bbl.

VEGETABLES.—Quoted as follows from second hands: Per dozen, onions, 15@18c, corn, 12@15c; egg plant, $1 20@1 25; cucumbers, 40@45c. Per bbl, cabbage, $1 00@1 50; wax beans, ℔ bu 95c@$1; squash, per case, $1. Per dozen bunches, beets, 20@25c; carrots, 30@35c. Celery, per doz., 30@35c; cauliflower, $1 25.

TOMATOES.—Ruled firm at 35@40c ℔ peck box, or 50@60c ℔ ½ bu. box.

PEACHES.—Market steady with receipts liberal. Fancy Southern quoted at $3 50 for red and $4 for Crawfords. Delaware fruit, $1 50 per ⅝ bu basket. Island stock, 30@45c per peck basket.

CRABAPPLES.—Market dull, with Siberian at 75@90 per bu.

BLACKBERRIES.—Lawtons were active and brought $3@3 50 per bu. Supply not equal to the demand.

HUCKLEBERRIES.—Market firm and supply moderate at $6@7 per stand.

GRAPES.—Concords selling at 75@80c per 10 lb basket. Ives dull at 70@75c.

WATERMELONS.—Quoted at $15@20 per 100. Stocks large and prices lower.

PEARS.—The finer varieties were quoted at $5@5 50; and Bells at $3@4 ℔ bbl.

NUTMEG MELONS.—Quoted at $1 50 @ $1 75 per crate, and $4 50 @ $5 50 per bbl. for Ohio and Illinois receipts.

PROVISIONS.—The market is quiet at the following quotations:

Mess, new	11 50	@11 75
Family	12 00	@12 25
Short clear	12 25	@12 75
Lard in tierces, ℔ ℔	6⅛@	6⅜
Lard in kegs, ℔ ℔	6¼@	6¾
Pure lard, in tierces	7½@	7¾
Hams, ℔ ℔	11 @	12
Shoulders, ℔ ℔	6¾@	7
Choice bacon, ℔ ℔	9¾@	10
Extra mess beef, new per bbl	7 25	@ 7 50
Plate beef	8 25	@ 8 50
Dried beef hams	9 75	@10 00
Tallow, ℔ ℔		@ 3¾

HAY.—The following is a record of the sales at the Michigan Avenue scales for the week up to Friday noon, with price per ton:

Monday.—14 loads: Three at $12; two at $13 and $9; one at $13, $11 50, $11 25, $11, $10 50, $8 50 and $7.

Tuesday.—22 loads: Five at $9; four at $10; three at $12 and $11; two at $10 50, $9 50 and $8; one at $11 50.

Wednesday.—25 loads: Twelve at $10; four at $9; two at $11, $9 50 and $8; one at $11 50, $10 50 and $7.

Thursday.—14 loads: Five at $10; three at $12; two at $8; one at $13, $11 50, $11 and $9 50.

Friday.—One load at $8.

LIVE STOCK MARKETS.

King's Yards.

CATTLE.

The market opened up at these yards with 765 head of cattle on sale. The quality of the receipts continue poor, more so than usual for this time of year. The attendance of buyers was good, and the demand fully equal to the supply. Prices ranged higher than they did one week ago, by 10@15 cents and for the commonest grades the advance was more marked than for mediums. The yards were cleared early and the feeling was strong. The following were the closing

QUOTATIONS:

Fancy steers weighing 1,500 to 1,650 lbs	nominal.
Extra graded steers, weighing 1,300 to 1,450 lbs	3 90@4 00
Choice steers, fine, fat and well formed, 1,100 to 1,300 lbs	3 50@3 75
Good steers, well fatted, weighing 950 to 1,100 lbs	3 35@3 75
Good mixed butchers' stock—Fat cows, heifers and light steers	2 85@3 15
Coarse mixed butchers' stock—Light thin cows, heifers, stags and bulls	2 00@2 50
Stockers	2 25@2 50
Bulls	1 75@2 50

Simmons sold McGee a mixed lot of 23 head of fair butchers' stock av 813 lbs at $2 55 and 17 thin ones av 1,117 lbs at $2 35.

Stevens sold Knoch 4 fat butchers steers but coarsish av 1,145 lbs at $3 40.

Dennis sold Marx a mixed lot of 9 head of good butchers' stock av 1,106 lbs at $2 90

Coats sold Sullivan 17 stockers av 740 lbs at $2 40 and 3 bulls av 730 lbs at $1 75.

Smith sold Sullivan 5 stockers av 748 lbs at $2 20.

Weber sold J Wreford 6 fair butchers' steers av 1,106 lbs at $3 25.

Kalaher sold J Wreford a mixed lot of 4 head of good butchers' stock av 9 5 lbs at $3.

Bird sold Murphy a mixed lot of 25 head of thin butchers' stock av 695 lbs at $2 40.

Hogan sold Marx a mixed lot of 10 head of thin butchers' stock av 746 lbs at $2 50; 4 bulls av 717 lbs at $2 and 4 stockers to Sullivan av 702 lbs at $2 20.

Dunn sold Flieschman 10 good steers and cows av 1,192 lbs at $3 25 and 4 thin cows av 1,100 lbs at $2 25.

Knox sold H Roe a mixed lot of 5 head of fair butchers' stock av 762 lbs at $2 55.

Beardsley sold McGee a mixed lot of 27 head of thin butchers' stock av 736 lbs at $2 35.

Webb sold Kofski a mixed lot of 4 head of good butchers' stock av 907 lbs at $3.

Flieschman sold Knoch 6 choice steers av 1,310 lbs at $3 75.

McHugh sold Marx a mixed lot of 14 head of fair butchers' stock av 900 lbs at $2 75 and 6 to Loosemore av 816 lbs at $2 60.

Allen sold Sullivan 20 stockers av 720 lbs at $2 30 and 3 bulls av 996 lbs at $2.

Watson sold Sullivan 8 stockers av 823 lbs at $2 40.

Webber sold Reagan a mixed lot of 6 head of coarse butchers' stock av 755 lbs at $2 20.

Clark sold Kamman a mixed lot of 15 head of fair butchers' stock av 982 lbs at $2 60.

Pinkney sold Switzer & Ackley 19 stockers and feeders av 862 lbs at $2 50 and a mixed lot of 7 head of thin butchers' stock to McIntire av 864 lbs at the same price.

Wietzel sold Stucker a mixed lot of 5 head of thin butchers' stock av 662 lbs at $2 40.

Capwell sold Wreford & Beck a mixed lot of 8 head of thin butchers' stock av 765 lbs at $2 50.

Beardsley sold Switzer & Ackley 6 feeders av 896 lbs at $2 75.

Gleason sold John Robinson a mixed lot of 5 head of good butchers' stock av 946 lbs at $2 85.

Capwell sold Bussell a mixed lot of 21 head of thin butchers' stock av 783 lbs at $2 50.

Buck sold McGee a mixed lot of 23 head of coarse butchers' stock av 541 lbs at $2.

Taylor sold Sullivan 6 stockers and feeders av 810 lbs at $2 50.

Ramsey sold Farnam a mixed lot of 13 head of fair butchers' stock av 852 lbs at $2 65.

Balderson sold Flieschman a mixed lot of 26 head of coarse butchers' stock av 618 lbs at $2 20.

Stevens sold Flieschman a mixed lot of 21 head of thin butchers' stock av 794 lbs at $2 50.

Purdy sold Voigt a mixed lot of 9 head of fair butchers' stock av 833 lbs at $2 60.

Adgate sold John Robinson a mixed lot of 26 head of thin butchers' stock av 740 lbs at $2 50.

Johnson sold Flieschman a mixed lot of 6 head of coarse butchers' stock av 610 lbs at $2.

Purdy sold Stucker a mixed lot of 8 head of thin butchers' stock av 645 lbs at $2 35 and 9 fair ones to Kamman av 895 lbs at $2 65.

Beardsley sold Marx a mixed lot of 9 head of fair butchers' stock av 775 lbs at $2 62½.

Horner sold Flieschman a mixed lot of 13 head of coarse butchers' stock av 770 lbs at $2 25 and 2 bulls av 625 lbs at $2.

SHEEP.

The offerings of sheep numbered 1,947 head. The demand for sheep was active on both local and shipping account, and the receipts were disposed of at prices a strong 10@15 cents higher than those of last week.

Pierson sold Clark 72 av 71 lbs at $3 50.

Holmes sold Clark 41 av 77 lbs at $3 75 and 61 lambs av 59 lbs at $5.

Ramsey sold Young 50, part lambs, av 68 lbs at $4 15.

Robb sold Clark 28 av 95 lbs at $4 and 80 lambs av 56 lbs at $5.

Knox sold Fitzpatrick 60 av 66 lbs at $3 30.

White sold Brooka 176, part lambs, av 76 lbs at $4 15.

Sweet sold Brooka 127, part lambs, av 59 lbs at $3 65.

Page sold Clark 68, part lambs, av 65 lbs at $4.

Sweet sold Monahan 76, part lambs, av 68 at $3 65.

Johnson sold John Robinson 80, part lambs, av 67 lbs at $4 25.

Glenn sold Fitzpatrick 129 av 74 lbs at $3 75.

Bunnell sold Brooka 75 av 78 lbs at $3 75.

Shaw sold Fitzpatrich 57 lambs av 69 lbs at $5 50.

Shook sold Morey 40 lambs av 61 lbs at $5 35.

Kalaher sold John Bobinson 42 av 67 lbs at $3 50.

Monahan sold Chope 146, part lambs, av 65 lbs at $4 25.

HOGS.

The offerings of hogs numbered 1,485 head. The hog market opened up active at an advance of 5@10 cents over the prices of last week, ruled steady and closed firm.

Bunnell sold Webb Bros 19 av 184 lbs at $4 50.

Switzer & Ackley sold Webb Bro 38 av 163 lbs at $4 50.

Harger sold Webb Bros 55 av 188 lbs at $4 50.

Parks sold Webb Bros 48 av 198 lbs at $4 50.

Page sold R S Webb 15 av 192 lbs at $4 50.

Kalaher sold Webb Bros 48 av 201 lbs at $4 55.

Shook sold R S Webb 11 av 210 lbs at $4 50.

Holmes sold Steele 43 av 150 lbs at $4 55.

Dennis sold Steele 50 av 182 lbs at $4 50.

Glenn sold Sullivan 59 av 131 lbs at $4 40.

McHugh sold Webb Bros 51 av 143 lbs at $4 50.

Pierson sold Webb Bros 21 av 215 lbs at $4 55.

Allen sold Steele 25 av 186 lbs at $4 50.

Bliss sold Ford 30 av 124 lbs at $4 50.

Knox sold Webb Bros 16 av 235 lbs at $4 50.

Taylor sold Steele 52 av 170 lbs at $4 50.

Weber sold Steele 33 av 165 lbs at $4 50.

Estep sold Steele 37 av 164 lbs at $4 50.

Watson sold Steele 15 av 184 lbs at $4 50.

Belhimer sold R S Webb 16 av 210 lbs at $4 50.

Balderson sold Sullivan 16 av 102 lbs at $4 75.

Talmage sold Steele 55 av 191 lbs at $4 55.

Long sold R S Webb 76 av 180 lbs at $4 50.

Belhimer sold Sullivan 25 av 160 lbs at $4 60.

Horner sold Williams 16 av 56 lbs at $4 50.

Ramsey sold Webb Bros 31 av 179 lbs at $4 50.

Adgate sold R S Webb 65 av 180 lbs at $4 50.

Horner sold sold R S Webb 33 av 198 lbs at $4 50.

Waterman sold Webb Bros 69 av 187 lbs at $4 55.

Capwell sold R S Webb 35 av 204 lbs at $4 50.

Standlick sold Steele 48 av 201 lbs at $4 55.

At the Michigan Central Yards.

CATTLE.

There was a light supply of Michigan cattle at these yards, but with 10 loads of westerns there were about enough to meet the demand. All the cattle brought 10@15 cents per hundred more than they did last week, and sold readily. A few good steers of 950 to 1,100 lbs were wanted, but none were on sale.

Giddings sold John Robinson a mixed lot of 27 head of fair butchers' stock av 850 lbs at $2 60.

Wreford & Beck sold Cross 21 mixed westerns av 916 lbs at $2 65 and 28 av 793 lbs at $2 50.

McQuillan sold Marx a mixed lot of 5 head of fair butchers' stock av 848 lbs at $2 65 and 6 thin ones av 778 lbs at $2 40.

Wreford & Beck sold John Robinson 27 mixed westerns av 886 lbs at $2 45 and 3 bulls av 1,046 lbs at $2.

McQuillan sold Sullivan 8 good cows av 1,130 lbs at $3 and 2 bulls av 525 lbs at $2.

Wreford & Beck sold Stonehouse 27 mixed westerns av 877 lbs at $2 65 and 39 to Mason av 777 lbs at $2 60.

McQuillan sold Reagan a mixed lot of 5 head of coarse butchers' stock av 743 lbs at $2 15.

Wreford & Beck sold Phillips 50 mixed westerns av 872 lbs at $2 37½ and 38 to Kelly av 580 lbs at $2 12½.

SHEEP.

The supply of sheep was light and the few sales made show a considerable advance over the prices of last week.

C Roe sold John Robinson 30 av 80 lbs at $4 and 35 av 64 lbs at $3.

O'Hara sold Monahan 82 av 77 lbs at $3 80.

HOGS.

For the hogs offered the demand was active at prices 5@10 cents higher than those of one week ago.

C Roe sold Webb Bros 26 av 210 lbs at $4 50.

Giddings sold Webb Bros 74 av 208 lbs at $4 55.

Hill sold Steele 59 av 187 lbs at $4 47½.

Merritt sold Steele 36 av 186 lbs at $4 55.

O'Hara sold Steele 14 av 227 lbs at $4 50.

C Roe sold Sullivan 77 av 155 lbs at $4 50.

Chicago.

CATTLE.—Receipts 50,856, against 46,183 last week. Shipments 19,169 head. The receipts of cattle on Monday numbered 14,509 head, the bulk of which were natives. Texas cattle were scarce and 10 cents higher than on Saturday Most of the other grades sold 5@10 cents lower. Dressed beef men and outside buyers both purchased freely. Exporters bought several hundred beeves for direct export at $4 20@4 50. One Boston firm purchased 157 head, averaging 1,562@1,631 lbs at $4 50. Some 1,364 lb steers sold to an exporter at $4 40; some 1,550 lb steers sold at $4 10 and 1,402 lb steers as low as $3 50. Shippers bought principally at $4@4 30; some 1,404 lbs stillers sold at $4. Dressed beef men bought native steers averaging 840@1,501 lbs at $3 20@4 40, bulk at $3 90@4 20. A bunch of 204 meal-fed steers averaging 1,428 lbs at $4 40. Texas cows averaging 565 to 835 lbs sold at $1 65@2 25 and steers averaging 864 to 1,151 lb at $2 45@3 15, with one lot of 140 lb Texas calves at $4. Stock cattle sold at $2 20@3 15. Native butcher stock sold at $1 50@3 25 for cows, heifers, bulls and steers. On Tuesday native cattle were in light supply and sold 5@10 cents higher with other grades steady at former prices. The market on Wednesday was steady and on Thursday ruled strong with moderate receipts. On Friday the receipts were light and the market strong at the following

QUOTATIONS:

Good to choice steers, 1,500 to 1,700 lbs	4 55@4 70
Fair to good 1,150 to 1,450 lbs	3 75@4 50
Poor to fair, 900 to 1,250	3 30@4 30
Grassers, 1,000@1,500 lbs	3 00@3 65
Fancy native cows and heifers	2 80@3 10
Common to choice cows, 850 to 1,000 lbs	1 25@2 65
Poor to best bulls, 900 to 1,800 lbs	1 90@2 60
Stockers and Feeders	2 25@3 25
Texas bulls and cows	1 50@2 00
Texas steers	2 10@3 20

HOGS.—Receipts 56,177, against 55,956 last week. Shipments 21,120. The receipts of hogs on Monday numbered 13,800 head. For light hogs the market was steady at Saturday's rates; mixed grades were weaker and heavy, 5 cents lower. Poor to prime light sold at $4 25@4 65; mixed $4 25@4 55; heavy, $4 20@4 35; skips and culls, $3 50@4 10. Prices were 5 cents higher on Tuesday and ruled steady on Wednesday. Heavy hogs on Thursday were 5 cents lower, other grades unchanged. On Friday the hog market was active and strong to 5 cents higher. Light sold at $4 40@4 75; mixed, $4 25@4 50; heavy, $4 20@4 30, and skips and culls at $3 50@4 10.

Buffalo.

CATTLE.—Receipts 7,658, against 9,974 the previous week. The offerings of cattle on Monday were lighter than for some weeks past. There was a good attendance of buyers and the market was active and prices on good cattle were higher, while common were dull and weak. The best heavy cattle of 1,460 to 1,500 lbs for export brought $4 40@4 55; good shipping 1,300 to 1,400 lbs, $4 20@4 35; good 1,200 to 1,275 lbs, $3 90@4 15; medium steers of 1,050 to 1,175 lbs, $3@3 80. Texas steers, $3 25@3 35, good fat lots of mixed butchers' cows very slow at $2@2 40 up to $3 65 as to quality. Bulls were in lighter supply and sold a shade lower than last week. Stockers and feeders were in good demand and sold $15@20 cents higher, running from $2 25@3 25, according to quality. For the balance of the week the run was very light and the few cattle on sale brought full Monday's prices. The following were the closing

QUOTATIONS:

Extra Beeves—Graded steers, weighing 1,500 to 1,600 lbs	$4 40@4 55
Choice Beeves—Fine, fat, well-formed steers, weighing 1,400 to 1,500 lbs	4 20@4 35
Good beeves—Well-fattened steers weighing 1,300 to 1,400	3 90@4 15
Medium Grades—Steers in fine flesh, weighing 1,100 to 1,200 lbs	3 50@3 80
Light Butchers'—Steers averaging 1000 to 1,100 lbs, of fair to good quality	3 25@3 60
Butchers' Stock—Inferior to common steers and heifers, for city slaughter, weighing 900 to 1,000 lbs	2 25@3 25
Michigan stock cattle, common to choice	2 25@3 00
Michigan feeders, fair to choice	2 50@3 25
Fat bulls fair to extra	2 25@3 00

SHEEP.—Receipts 19,800, against 13,600 the previous week. On Monday the market ruled a shade firmer for good butchers' and shippers' sheep of 80@95 lbs, but choice heavy grades of 100@115 lbs were no better if as strong as at the close of last week. Lambs of good quality also ruled strong, but common thin and light stock was no better, but about all were sold. Good to best sheep sold at $3 50@5, while common to fair ranged all the way from $3@3 25. Good to best lambs, $5 75@6 25; common to fair, $4 75@5 50. The market was quiet on Tuesday, steady and firm for sheep on Wednesday with lambs 25 cents higher, some selling up to $6 50. There was light trading on Thursday and Friday the market being quoted steady for sheep, and lambs selling up to $6 60@6 75 for best.

HOGS.—Receipts 20,320, against 14,760 the previous week. The market on Monday ruled with a fairly good demand for Yorkers and light grades at the closing prices of last week, while medium and heavy were rather slow. Prices, however, were without decided change, and the bulk of the offerings were sold. Sales ranged; Yorkers, good to choice corn-fed, $4 80@4 85; grassy and common lots, $4 65@4 75; mixed packers, good to choice corn-fed, $4 65@4 70; mediums, $4 50@4 60; heavy, $4 45@4 50. Prices were strong on Tuesday, advanced 5 cents on Wednesday and by Friday another 5 cents was added. At the close corn-fed Yorkers were quoted at $4 90@4 95; grassy do, $4 75@4 85; medium grades, $4 60@4 75 and heavy at $4 50@4 60.

Clara A. Carr, Complainant. vs. Frank R. Carr. Defendant } STATE OF MICHIGAN, THE CIRCUIT COURT for the County of Wayne, in Chancery.

Upon due proof by affidavit that Frank R. Carr, defendant in the above entitled cause pending in this Court, resides out of the said State of Michigan and in the State of Indiana, and on motion of W. F. Atkinson, Solicitor for Complainant, it is ordered that the said defendant do appear and answer the bill of complaint, filed in the said cause within six months from the date of this order, else the said bill of complaint shall be taken as confessed. And further, that this order be published within twenty days from this date, in the MICHIGAN FARMER, a newspaper published in the said County of Wayne, and be published therein once in each week for six weeks in succession; such publication, however, shall not be necessary in case a copy of this order be served on the said defendant personally, at least twenty days before the time herein prescribed for his appearance.

Dated this 19th day of July, A. D. 1889.

HENRY N. BREVOORT, Circuit Judge.

A true copy; attest, Wm. P. LANE, Register. a3-6t